

Homepage

Note: a certain amount of text, headings and specific keywords (positioned in specific locations, with specific HTML) are required to enhance the website's SEO prospects.

Hero Image Header & Byline:

[slider]

Dr Alex Polyakov

Specialist in female & male infertility diagnosis

Highly trained gynaecologist & laparoscopic surgeon

Statement / Quote:

"Your spine is both your backbone and your lifeline, intricately designed for strength and flexibility. Together, we'll navigate the complexities of your condition with precision and care, restoring not just your spine's integrity, but your quality of life."

About Me:

Dr XYZ is an Ophthalmologist & Ophthalmic Surgeon who consults across the Eastern Suburbs of Sydney. He specialises in cataract surgery.

Dr Genia Rozen is an experienced fertility specialist and gynaecologist based in East Melbourne and Bayside / Mornington Peninsula. She is dedicated to helping couples and individuals achieve a successful pregnancy.

My Experience:

Dr Rozen has 10+ years of experience at the highest level of fertility medicine and reproductive gynaecology and has sub-specialised training and academic qualifications in the field. She has a special interest in performing advanced reproductive procedures such as In Vitro Fertilisation (IVF) and is affiliated with Genea Fertility, who are an industry-leading fertility laboratory service based in Melbourne and have been established in Australia for 35+ years.

[\[Learn More About Me\]: /about-me](#)

Key Features of Our Clinic:

<u>Committed to Your Care</u>	<u>Urgent & Emergency</u>	<u>Fast Reporting to GPs</u>	<u>Telehealth</u>
When you seek a booking, we will assist with arranging appropriate investigations and tests prior-and-after your appointment.	Urgent appointments <u>always</u> accommodated within 7-days. Simply tell reception.	Rapid turn-around of reports, with written correspondence from your consult sent to your GP or other healthcare professional within 2–24hours.	We welcome consultation your spinal minimal dis [Learn More]

Areas of Expertise:

Dr XXX has undertaken sub-specialised training in XXX and has particular expertise in XXX.

[\[Areas of Expertise\]: /services](#)

Consulting Locations:

Dr XXX is based in Sydney and welcomes both private and public patients. He operates at leading private and public hospitals in Sydney.

[\[Learn More About Locations\]: /contact](#)

Call to Action:

[\[insert at template\]](#)

About Me

First/Last Name:	A/Prof Alex Polyakov
Qualification Acronyms:	MBBS, MCLinEpid, MRMed, MHealth&MedLaw, MBioeth, GradCertEBM, FACLM, FRANZCOG
Vocation:	Obstetrician & Gynaecologist, and Fertility Specialist

Overview

A/Prof Alex Polyakov is an Australian trained, highly experienced Obstetrician and Gynaecologist (O&G), and Fertility Sub-Specialist. He has 22+ years of experience and consults and operates in Melbourne. He also has a particular research interest in gynaecological and infertility issues.

A/Prof Polyakov is an active obstetrician working in private practice in Melbourne. He routinely performs a high volume of advanced laparoscopic gynaecological surgery and fertility surgery to rectify conditions such as uterine fibroids, PCOS, endometriosis, and more.

Key areas of experience:

- Obstetrics: 22+ years
- Gynaecology: 22+ years
- Fertility Medicine: 20+ years

A/Prof Polyakov actively works across the fields of obstetrics / gynaecology / fertility medicine. Accordingly, he is able to fully-manage each patient that he sees, rather than needing to on-refer to other specialists. This means if you have endometriosis or PCOS, or another condition that might affect your chances of conceiving, he can fully rectify your condition.

A/Prof Polyakov has a clinical research interest in gynaecology, advanced gynaecological surgery and infertility medicine, with a large number of publications in scientific journals. He holds four separate Masters Degrees and is dedicated to providing his patients with the highest standard of evidence-based clinical care.

My special interests:

- Obstetrics (low and high risk, elective caesareans)
- Diagnosis of female and male infertility
- IVF, IUI and OI
- Fibroid surgery (Myomectomy)
- Endometriosis surgery
- Abnormal vaginal bleeding
- Polycystic Ovarian Syndrome (PCOS)
- Hysterectomy (total, vaginal and abdominal)
- Fertility preservation (egg freezing)

Qualifications

- Fellow of the Royal Australian & New Zealand College of Obstetrics & Gynaecology (FRANZCOG)
- Fellow of the Australasian College of Legal Medicine (FACLM)
- Masters of Bioethics (MBioeth), Monash University, 2023
- Masters of Health and Medical Law (MHealth&MedLaw), University of Melbourne, 2020
- Masters of Reproductive Medicine (MRMed) with Distinction, UNSW, 2010
- Masters of Clinical Epidemiology / Biostatistics (MCLinEpid) with Distinction, University of Newcastle, 2010
- Graduate Certificate in Evidence-Based Medicine (GradCertEBM), Monash University, 2008
- Bachelor of Medicine & Bachelor of Surgery (MBBS), University of Adelaide, 2000

Academic, Research & Professional Appointments

- Bullet points
- Example: Associate Professor of Surgery at ABC University or Clinical Lecturer @ ABC University

- Associate Clinical Professor, Faculty of Medicine and Health Sciences, University of Melbourne
- Medical Director, Genea Fertility Melbourne
- Senior Consultant, Advanced Laparoscopy Unit, Royal Women's Hospital, Parkville
- Senior Consultant, Reproductive Biology Unit, Royal Women's Hospital, Parkville

Memberships

- Australian Medical Association (AMA)
- Royal Australian & New Zealand College of Obstetricians & Gynaecologists (RANZCOG)
- Australasian College of Legal Medicine
- American Society of Reproductive Medicine
- European Society of Human Reproduction

Experience In Numbers

- 5,000+ babies delivered
- 2,000+ babies conceived using ART (eg: IVF)
- 500+ women helped with Egg Freezing

Scientific Research Publications

- My [ResearchGate](#) Profile.
- My [ORCID](#) Profile.

Hospital Appointments

- Epworth Freemasons Hospital, East Melbourne (Obstetrics, Gynaecology, Fertility Medicine)

Consulting Locations

- East Melbourne

AHPRA Registration Number

- MED0001195393

Doctor's Call to Action (CTA)

A/Prof Alex Polyakov is an eminently experienced Melbourne Obstetrician and Gynaecologist, and Fertility Sub-Specialist. He has 22+ years of experience working across public and private practice.

A/Prof Polyakov has a clinical research interest in gynaecology and infertility medicine, with numerous publications in scientific journals. He holds four separate Masters Degrees and is dedicated to providing his patients with the highest standard of evidence-based clinical care.

[Get in touch today]

[/contact-us](#)

Services**Gynaecology****Contraception**

If you are not planning to start a family and are sexually active, a suitable contraceptive method is an important consideration. Here are some of the options to choose from, which are divided into short-term and long-term methods.

Short-term

Short term contractive methods are flexible and convenient for sexually active people wanting control of their reproductive health without a long-term commitment. They are suitable for those who may want to plan for pregnancy in the near future.

Barrier methods

Common barrier methods include condoms. Condom is a latex sheath worn on the erect penis before intercourse. It collects semen and prevents sperm from entering the vagina. (1)

Effectiveness:

This method is user-dependent and has a high typical failure rate as demonstrated below. (1)

Method	Perfect use %	Typical use %
Male condom	98	82

Advantages:

These methods are cheap, immediately available, come in various sizes and have no effect on your hormones.

A positive aspect of a barrier method is that it offers protection against Sexually Transmitted Diseases (STDs). (1)

Disadvantages:

Users of condoms report decreased sensation and dislike the interruption pause when putting it on.

There is a high chance of a condom break if not placed correctly. Latex allergic individuals need to use non-latex condoms or opt for an alternative method of contraception. (1)

Hormonal methods

Combined Oral Contraceptive Pill (COCP)

COCP is a tablet containing both estrogen and progesterone.

It works by inhibiting ovulation, reducing the ability of endometrial implantation, as well as thicken the cervical mucus, and hence forming a sperm barrier. (1) (4)

Effectiveness:

COCP is highly effective if used correctly.

Method	Perfect use %	Typical use %
COCP	99.7	91

Advantages:

This method is readily accessible, reversible and can help manage menstrual problems such as heavy bleeding, pelvic pain and acne. (1)

Another benefit of COCP is cycle control, where you can manipulate when to have or even skip your withdrawal bleed. (3)

Additionally, there are a number of non-contraceptive benefits associated with taking the pill. These include decreased risk of:

- Ovarian cancer
- Endometrial cancer
- Benign breast disease
- Iron-deficiency anemia
- Ovarian fibroids and cysts (3)

Disadvantages:

Since the pill needs to be taken at the same time everyday, within a 12-hour window, its effectiveness relies on the user.

Some of the common side effects include: nausea, breast tenderness, reduced libido and weight gain. (1)

COCP has some contraindications to its use such as history of blood clots, high blood pressure and migraines with aura.

COCP offers no protection against STDs.

Progestogen-only pills (POP)

POP's main action is to prevent sperm penetration by thickening the cervical mucus.

Efficacy is similar to COCP, but the window to take a tablet is reduced from 12 hours to 3 hours.

The advantage with POP is that to get the contraceptive cover back, the patient would have to take 3 active pills instead of 7 as with combined preparation.

Disadvantage of POP is the side effects of irregular bleeding patterns and spotting.

POP is a good option for women who experience nausea and breast tenderness with estrogen. Additionally, the presence of migraines and family history of hypertension are not a concern with POP. It is also an oral contraceptive of choice during breastfeeding. (1)

Combined vaginal contraceptive ring

The Vaginal ring is a type of birth control that features a soft plastic ring that contains both estrogen and progesterone. The brand that is available in Australia is NuvaRing®. The ring is inserted vaginally for three weeks every month, and it works in a similar way to the COCP to prevent pregnancy.

Another similarity with COCP is the benefit of cycle control, where a woman can skip her withdrawal bleed.

It is highly effective if used correctly, but effectiveness is dependent on the user.

Method	Perfect use %	Typical use %
Vaginal ring	99	93

It can be a good option for women who find it difficult to remember to take a pill every day and who do not feel comfortable with long-term methods of contraception.

It does not protect against STDs.

Long-term methods

Longer term contraceptive methods offer a reliable and sustained approach to managing reproductive health. They are suitable for individuals looking for effective, low-maintenance contraception over an extended period, while retaining flexibility to adjust family planning goals as needed.

Intra-Uterine Devices (IUDs)

IUDs are small devices inserted into the uterus cavity and are one of the most effective reversible methods of contraception.

In Australia it is available in two types: hormonal based (Mirena®) and non-hormonal (Multiload-Cu375®). (1)

Effectiveness: Both types are 99% effective and are not user-dependent. (1)

Advantages:

Both IUDs can be removed at any time when the patient would like to get pregnant. Return to fertility post-IUD is immediate.

IUD expulsion is slightly higher in women who have not given birth but is not contraindicated in this group. (1)

It is an extremely cost effective long-term contraceptive method and both types last for 5 years.

One of the additional benefits of Mirena is that it decreases menstrual flow and the associated period pelvic pain. (1)

Disadvantages:

Copper IUDs may increase menstrual bleeding and have a higher chance of spotting, particularly in the first 6 months of use.

There is a slight risk of infection associated with insertion of an IUD.

There is no protection from STDs. (1)

Progesterone only contraceptives**Progesterone Implant**

Progesterone implant (Implanon) is a small piece of flexible plastic implanted under the skin of the upper arm. (1)

Implanon slowly releases progesterone into the body, which keeps the sperm from joining with an egg by thickening the cervical mucus. (1)

It is 99.9% effective. (1)

Advantages:

It is very long lasting and approved for 3 years use.

Not user dependent.

Return to fertility is immediate upon the removal.

Very few contraindications and could be an option for women who experience estrogen related side effects. (1)

Disadvantages:

Device insertion and removal involves a minor surgical procedure. Not many General Practitioners (GPs) are trained in this technique hence a referral may be required to a Gynecologist.

Irregular bleeding patterns during the first 6 to 12 months is common.

Other uncommon side effects include: headache, acne, weight change, breast pain, hirsutism, mood changes, and loss of libido.

No protection against STDs. (1)

Progesterone Depot

Progesterone depot (DepoProvera®) is an oily Intramuscular injection that slowly releases the hormone into the body. (1)

Released progesterone, thickens the cervical mucus, thins the endometrial lining and prevents ovulation. (1)

It is 94-99% effective and is not user -dependent. (1)

Advantages:

The effect is long lasting and injection needs to be repeated every 3 months.

It has a similar profile to Implanon with a slightly lower efficacy and a less advantageous side effect profile. (1)

Disadvantages:

More common side effects include: bleeding pattern change (irregular and heavier), weight gain, breast tenderness and depression.

Returning to the baseline fertility cannot be reversed immediately. (1)

Taking into the account that our patient is a frequent traveler, depot injection every 3-month may be inconvenient. Also side effects profile is less superior to Mirena and on par with Implanon. (1)

Permanent methods

Permanent contraceptive options provide a definitive solution for individuals seeking a lasting and irreversible method to prevent pregnancy.

Tubal Ligation (Female)

If a woman feels that her family is complete, she may opt for a permanent option of contraception. Using laparoscopy (keyhole) surgery, clips are inserted on the fallopian tubes to block the sperm and egg from meeting.

This is a very effective permanent form of contraception, but this option does not give protection to STIs.

Vasectomy (Male)

Similarly, if a man does not wish to father children, he may opt for a permanent contraceptive option Vasectomy. This is a minor surgical operation where the tubes that carry the sperm from the testes are cut. After this procedure there will be no sperm present in the ejaculate.

Vasectomy is 99% effective at preventing pregnancy, but this option does not give protection to STIs.

Majority of contraceptive options may be available from your GP. However, some of the longer lasting and permanent options can only be done by a specialist. Dr Polyakov can not only assist you in your choice of the most suitable contraceptive method but is also able to arrange an insertion or a procedure for all the options available.

References:

1. [Contraception: an Australian clinical practice handbook](#). Family Planning NSW, Family Planning Queensland and Family Planning Victoria 2013. [cited 2014 May 11].
2. Guillebaud J, MacGregor A. Contraception: your questions answered. 6th ed. Churchill Livingstone Elsevier; 2013.
3. Fraser IS, Kovacs GT. The efficacy of non-contraceptive uses for hormonal contraceptives. Medical Journal of Australia 2003 June; Vol 178: p621-623.
4. [Australian Medicines Handbook](#). Australian Medicines Handbook Pty Ltd 2014. [cited 2014 May 11] [Chapter: Drugs for contraception](#).

Endometriosis

Endometriosis is a condition where the innermost layer of the uterus, the endometrium, grows in other locations. Endometriosis may cause adhesions, which means the uterus can become stuck to the ovaries, fallopian tubes and bowel.

Condition

Endometriosis impacts one in seven women in Australia, and can cause significant pain and infertility. It mostly affects the female reproductive system, but can also be found in and around the bowel and bladder.

What is the percentage of the population affected by endometriosis?

One in 10 women are affected by endometriosis.

How does endometriosis affect you?

The two main problems that endometriosis can cause are:

- Pain
- Infertility

Which part of the body is affected?

The female reproductive system is made up of the following parts:

- Vagina: opening of the reproductive system, which allows the entry of sperm
- Cervix: narrow region that connects the vagina to the uterus
- Uterus: womb, where a fertilised egg implants and grows to develop into a baby
- Ovaries: organs on either side of the uterus, which release an egg each month in the prospect of a pregnancy
- Fallopian tubes: narrow tubes that open out at the ovaries to pick up the released egg for fertilisation

The uterus is made up of three layers. The innermost layer is called the endometrium, the second layer, myometrium and the third layer, the serosa. Every month, the endometrial layer is built and thickens in preparation to accept the fertilised egg for implantation and provide nourishment to the growing embryo, until birth. If the egg does not get fertilised, the layer of tissue that is formed sloughs off and passes out in the form of your monthly period.

Causes and Effects

What are the causes of endometriosis?

Although the exact cause is not certain, your endometriosis specialist in Melbourne may offer the following explanations:

- Retrograde menstruation: backflow of menstrual tissue
- Transformation of peritoneal cells or cells that line the abdomen into endometrial cells
- Transformation of embryonic cells during puberty
- Attachment of endometrial cells to a surgical incision
- Transport of endometrial cells by the blood or lymph system
- Immune system disorder that fails to recognise endometrial cells growing in other organs as abnormal

Symptoms and risks

What are the signs and symptoms of endometriosis?

The symptoms of endometriosis vary widely from woman to woman and the severity of symptoms is not necessarily related to the severity of the condition. While some women have few or no symptoms, others

experience severe and incapacitating pain that recurs each month for many years. Your endometriosis specialist in Melbourne will help characterise the following symptoms:

- Pain during periods (dysmenorrhoea)
- Pain with intercourse (dyspareunia)
- Pain during urination or bowel movements
- Heavy bleeding
- Bowel disturbances, including painful bowel motions, diarrhoea, constipation, bleeding from the bowel
- Difficulty getting pregnant
- Painful urination
- Lower back, thigh and/or leg pain
- Premenstrual syndrome (PMS)

Many women think that painful periods are normal. If you have bad period pain, you should see your local endometriosis specialist in Melbourne, Dr. Alex Polyakov. The anticipation of recurrent pain or discomfort each month may also lead to feelings of anxiety, stress and depression. It is important to acknowledge these emotional difficulties that may arise from endometriosis.

What are the related disorders that occur with endometriosis?

Endometriosis can be associated with infertility and ovarian cancer.

Diagnosis and stages

How is endometriosis diagnosed?

When you present to your doctor's clinic with severe pelvic pain, your medical history is reviewed and a thorough physical examination performed. Your endometriosis specialist in Melbourne will likely order an ultrasound or transvaginal ultrasound to view the reproductive organs for cysts.

The standard diagnosis for endometriosis is a laparoscopic procedure, where a lighted tube called a laparoscope is inserted into your pelvic region through your belly button. The images captured by the camera on the laparoscope are relayed on a big screen for your doctor to see clearly. A biopsy or a sample of the suspected tissue is removed for further examination and confirmation of endometriosis.

Is diagnosis needed?

Diagnosis with the laparoscopy may not be required in most cases. Your endometriosis specialist in Melbourne may suspect endometriosis just by your symptoms, a physical exam and an ultrasound. If you do not intend to get pregnant immediately, you can discuss the need for an invasive procedure such as laparoscopy surgery.

What are the stages of endometriosis?

There are four stages (stage I to IV) of endometriosis based on the location, size, depth and extent of its implantation into the foreign tissue, presence of scar tissue and its severity, and the presence and size of endometrial tissue in the ovaries. The stages do not determine the extent of pain or other symptoms, or chances of infertility.

Superficial implantation with mild scarring is classified under minimal or mild stage. Moderate and severe forms of endometriosis are characterised by cysts and severe scarring. Stage IV endometriosis is characterised by infertility.

Treatment

Treatment for endometriosis will depend on individual circumstances, but typically consist of watchful waiting, hormonal treatments or surgery.

Treatment options

What are the treatment options for endometriosis?

There is no cure for endometriosis but pain relief and pregnancy can be achieved by the following methods:

- Medication: these can be in the form of
 - Hormonal: oral contraceptive pills and progesterone (a female hormone) administered orally, as an injection, through an intrauterine device or device inserted under your skin
 - Non-hormonal: pain relievers, NSAIDs
- Surgery:
 - Conservative surgery: to remove endometrial implantations
 - Laparoscopy
 - Laparotomy
 - Radical surgery: to remove the uterus, cervix and ovaries Hysterectomy

Often, surgery is combined with medical therapy either before the procedure to decrease the size of the lesion or after, to lower the chances of recurrence.

Non-treatment options

What are the consequences of not treating endometriosis?

Left untreated, endometriosis can remain as it is or become more severe. Mild forms of endometriosis may improve with time and most often resolve after menopause. Your decision to treat or not to treat is based on balancing the effects of endometriosis on your life and the risks of treatment.

When should I consider watchful waiting of endometriosis?

Your endometriosis specialist in Melbourne may suggest watchful waiting if you have mild endometriosis, to observe the course of the disease and if you are approaching menopause.

Ectopic Pregnancy

An ectopic pregnancy is characterised by the implantation of a fertilised egg (embryo) in a region other than the uterus. Since it occurs most often in the fallopian tube, it is sometimes referred to as a tubal pregnancy. The uterus is the only organ designed to hold and nurture a growing embryo; hence, the attachment of the embryo in any other place needs to be treated.

Condition

Approximately one out of every 50 pregnancies is an ectopic pregnancy, where the embryo implants somewhere other than the uterus. If left untreated, it will lead to serious complications.

What is the percentage of the population affected by ectopic pregnancy?

An ectopic pregnancy can occur in 1 out of 50 pregnancies.

How does ectopic pregnancy affect you?

The organ/tissue other than the uterus will not support the growing embryo and will lead to serious complications if left untreated.

Which part of the body is affected?

The normal process of reproduction involves a chain of events. The woman releases an egg from one of her ovaries (ovulation). The egg travels through a fallopian tube toward her uterus (womb). A man's sperm is introduced into the vagina through intercourse and travels up the uterus and into the fallopian tube to join with (fertilise) the egg at the fallopian tube. The fertilised egg then attaches to the inside of the uterus, initiating pregnancy.

Causes & Effects

What are the causes of ectopic pregnancy?

Ectopic pregnancy can be caused by a damaged fallopian tube. Some of the factors that can lead to an ectopic pregnancy can include:

- Blockage of the fallopian tube due to an infection or inflammation
- Scar tissue formed from an infection or previous surgery on the tube
- Adhesions caused by previous surgery in the fallopian tubes or pelvic area

These may impede the movement of the fertilised egg past the tubal defect into the womb, and cause it to implant in the fallopian tube.

Who is at risk of ectopic pregnancy?

Your risk of an ectopic pregnancy increases with the following factors:

- Older than 35-44 years of age
- Previous history of ectopic pregnancy
- Pelvic inflammatory disease (PID)
- Endometriosis
- Taking fertility medication or undergoing fertility treatments
- Smoking

Symptoms & Risks

What are the signs and symptoms of ectopic pregnancy?

You may sometimes experience symptoms of a normal pregnancy such as

- A missed period
- Tender breasts
- Tiredness
- Nausea
- Frequent urination

Sometimes, you may not show any symptoms. If you do have symptoms, they may show up at the 4th to 12th week of pregnancy and may include:

- Abnormal vaginal bleeding either heavier or lighter than usual
- Stabbing pain in the abdomen, pelvis, shoulder or neck
- Painful intercourse or pelvic examination
- Fainting, weakness or dizziness
- Nausea or vomiting

What are the related disorders that occur with ectopic pregnancy?

Ectopic pregnancy may be associated with endometriosis or pelvic inflammatory disease.

Diagnosis

How is an ectopic pregnancy diagnosed?

When you visit the clinic with signs of an ectopic pregnancy, your doctor will review your medical history and previous instances of an ectopic pregnancy, and perform a thorough pelvic exam. A transvaginal ultrasound scan may be ordered to ascertain the presence of a developing foetus. hCG and progesterone levels are also tested through a blood test.

If the presence of an ectopic pregnancy is still not clear, a laparoscopic procedure may be carried out, where a narrow lighted tube with a camera is inserted through a small abdominal incision to directly examine the fallopian tube and uterus.

Treatments

Left untreated, ectopic pregnancy can result in the rupture of the fallopian tube and severe loss of blood. However, your doctor may consider watchful waiting or expectant management instead of immediate treatment in order to consider the least invasive form of treatment first.

What are the consequences of not treating ectopic pregnancy?

Left untreated, ectopic pregnancy can result in the rupture of the fallopian tube and severe loss of blood.

When should I consider watchful waiting for an ectopic pregnancy?

When you are diagnosed with ectopic pregnancy, your doctor may consider watchful waiting or expectant management instead of immediate treatment in order to consider the least invasive form of treatment first.

Expectant Management

How does expectant management help manage my condition?

You will be closely monitored with blood tests at regular intervals to ensure that your hCG levels are dropping, until levels less than 5<mIU/mL have been achieved. Expectant management is only considered in the following cases:

- Low beta hCG (pregnancy hormone) levels
- Stable overall health
- Acceptable pain levels
- Small ectopic pregnancy with no threat of bleeding

Most often, ectopic pregnancy will resolve on its own (aborting) without the need for any kind of treatment. You can help by avoiding heavy lifting, engaging in strenuous exercises and sexual activity. You are also advised to stop taking folic acid and other vitamins and minerals that support a pregnancy.

Treatment options

What are the treatment options for ectopic pregnancy?

If your pregnancy does not resolve as indicated by the blood tests, you will be advised other forms of treatment, which may include:

- Medication: You will be given an injection to abort the growth of the foetus

- Surgery: A surgical procedure may be performed to remove the ectopic tissue, repair the fallopian tubes and stop bleeding.

When is medication or surgery indicated?

Medication is indicated in the following cases:

- Pregnancy is at its early stages and has not progressed too far
- Embryo has still not developed a heartbeat
- hCG levels are less than 5,000

Surgery is indicated in the following cases:

- Severe symptoms
- Bleeding
- High hCG levels
- Signs of fallopian tube rupture

How is surgery performed?

Surgery to treat ectopic pregnancy can be performed through two approaches:

Laparoscopy

Surgery may be performed through a minimally invasive approach using a narrow lighted tube with a camera called a laparoscope. Through small incisions, the laparoscope and small surgical instruments are inserted to view and perform the surgery. Your surgeon will attempt to remove the entire fallopian tube with the ectopic tissue if the other tube is healthy or the ectopic pregnancy alone, leaving the tube intact.

Laparotomy

Laparotomy is performed as an emergency procedure in case of rupture and bleeding. A single large incision is made on your abdomen. Bleeding is stopped and the fallopian tube is carefully repaired.

After treatment

What can I expect after ectopic pregnancy treatment?

Following surgery, you are usually able to go home on the same day or next. You may experience abdominal discomfort, and neck and shoulder pain for a few days due to the gas pumped into your abdomen. This will eventually resolve. You will be prescribed pain medication to keep you comfortable.

If your treatment involves the administration of medication this would be done as an outpatient procedure, but you will have to visit the clinic regularly for blood tests to confirm the treatment outcome.

Expectant management

You will not experience any complications or side effects from waiting, but due to the risk of rupture, you may eventually require surgical treatment.

Medication

This is a simple conservative treatment for ectopic pregnancy.

Surgery

Surgical removal of the fallopian tube is the most effective form of treatment. Laparoscopic surgery has additional advantages of:

- Shorter hospital stay

- Faster recovery
- Less pain and post-surgery complications
- Minimal scar formation

Describe the stages of recovery and care plan

Following the administration of ectopic pregnancy medication, you will be instructed to have protected intercourse for at least three months as the medication can be harmful for a foetus, should you conceive during this time. You are also advised to avoid alcohol after the injection as the combination of alcohol and medication can damage your liver. Since there is still a chance of the fallopian tube rupturing, your doctor will inform you on the signs that you need to look out for. Consult your doctor immediately if you experience:

- Fever
- Vaginal bleeding
- Severe abdominal pain
- Nausea and vomiting

After surgery, you will need anti-D rhesus prophylaxis if your blood type is RhD negative. This is an injection that prevents the occurrence of rhesus disease in future pregnancies. You are instructed not to lift heavy objects for 3 weeks. You can resume sexual activities once your bleeding stops or after 3 months, if a hysterectomy is performed.

Treatment outcomes

What are the outcomes of ectopic pregnancy treatment?

While medication can destroy the ectopic pregnancy, there is still a risk of fallopian tube rupture. Surgery, on the other hand, is an effective treatment that removes the pregnancy along with the diseased/damaged fallopian tube. However, this may make it difficult for you to get pregnant.

What are the potential complications of ectopic pregnancy treatment?

As with most drugs, the medication injected to stop the pregnancy from growing may be associated with certain side effects such as:

- Stomach pain
- Diarrhoea
- Dizziness
- Feeling sick

As with all surgeries, ectopic pregnancy surgery may be associated with certain complications such as:

- Infection
- Bleeding
- Blood clots
- Heart problems
- Breathing problems
- Damage to nearby organs

What is the downtime of ectopic pregnancy surgery?

You should be able to resume your normal activities in 1 or 2 days after surgery.

What is the likelihood of ectopic pregnancy recurrence? How can it be managed?

Scar formation after surgery and incomplete removal can increase your risk of ectopic pregnancy recurrence. If you are a high risk recurrence, your doctor may inject a drug to destroy any traces of the pregnancy.

How can ectopic pregnancy be prevented? What are the lifestyle recommendations to manage the condition?

Although ectopic pregnancy cannot be prevented in all cases, you can reduce your risk by maintaining good reproductive health. By limiting your sex partners and practicing safe sex, you can prevent sexually transmitted diseases that can cause inflammation of your fallopian tubes. Quitting smoking is also a positive step in the prevention of ectopic pregnancy.

Fibroids

Fibroids are non-cancerous tumours of the uterus that appear during your childbearing years. They can appear on the inside or outside lining of your uterus, or within its muscular wall. Fibroids usually develop from a single smooth muscle cell that continues to grow.

Condition

Also known as myomas, fibromyomas or leiomyomas, fibroids are non-cancerous tumours of the uterus. Uterine fibroids are the most common type, affecting about 70% white women and more than 80% black women.

What are the common names for fibroids?

Fibroids are also called myomas, fibromyomas or leiomyomas.

What is the percentage of the population affected by fibroids?

Uterine fibroids are the most common type of benign growth that affects the uterus. It affects about 70% white women and more than 80% black women.

Which part of the body is affected?

The female reproductive system is made up of the following parts:

- Vagina: opening of the reproductive system, which allows the entry of sperm
- Cervix: narrow region that connects the vagina to the uterus
- Uterus: womb, where a fertilised egg implants and grows to develop into a baby
- Ovaries: organs on either side of the uterus, which release an egg each month in the prospect of a pregnancy
- Fallopian tubes: narrow tubes that open out at the ovaries to pick up the released egg for fertilisation

The uterus is made up of three layers — The innermost layer is called the endometrium, the second layer, myometrium and the third layer, the serosa. Every month, the endometrial layer is built, and thickens in preparation to accept the fertilised egg for implantation and provide nourishment to the growing embryo, until birth. If the egg does not get fertilised, the layer of tissue that is formed sloughs off and passes out in the form of your monthly period.

Causes & Effects

How do fibroids affect you?

Uterine fibroids usually cause problems during your periods. They can be very painful, affect your fertility and cause complications during your pregnancy.

What are the different types of fibroids?

- Fibroids are categorised by their location, which include:
- Intramural: most common variety that grows in the uterine wall
- Submucosal: grows in the uterine lining (endometrium), causing excessive menstrual bleeding and period pain
- Subserosal: grows on the exterior wall of the uterus and sometimes appears as long stalks

What are the causes of fibroids?

Uterine fibroids may be caused by:

- Genetic changes
- Presence of high levels of oestrogen and progesterone hormones
- Growth factors

Who is at risk of developing fibroids?

The risk factors for uterine fibroids are:

- Increasing age
- High BMI
- High alcohol consumption
- History of infertility

Symptoms & Risks

What are the signs and symptoms of fibroids?

In many cases, fibroids are asymptomatic. Symptoms may include:

- Heavy periods
- Lengthy periods that last more than a week
- Painful periods
- Spotting between periods
- Painful intercourse
- A sense of heaviness or pressure in the back, bowel and bladder
- Frequent urination
- A lump or swelling in the lower abdomen

What are the related disorders that occur with fibroids?

Uterine fibroids can be associated with anaemia, urinary problems, miscarriage, premature labour and infertility. Fibroids can prompt the growth of polyps in the uterine lining (endometrium). A polyp is a small protrusion that looks like a tiny ball on the end of a slim stalk. Endometrial polyps can also contribute to menstrual problems, such as excessive bleeding and pain.

Diagnosis

How are fibroids diagnosed?

Fibroids can be detected using an ultrasound, where sound waves create a two-dimensional picture. The inside of the uterus can be examined with a hysteroscope, which is a thin tube passed through the cervix. A

small camera may be placed at the tip of the hysteroscope, so that the interior of the uterus can be viewed on a monitor.

Treatment

Most uterine fibroids that do not cause any problem can be left untreated. They are benign, and may remain the same size or grow very slowly, causing no symptoms to mild signs and symptoms. As the levels of reproductive hormones drop with menopause, the fibroids usually shrink in size.

Surgical options

Surgeries

- Open surgery: required for the removal of larger fibroids
- Laparoscopy: keyhole surgery is performed where a thin tube is inserted through the abdomen to remove the fibroids
- Myomectomy: uterine fibroids are excised, retaining the ovaries
- Hysterectomy: a part or all of the uterus is removed
- Hysteroscopy: fibroids are removed via the cervix, using a hysteroscope

Non-Surgical options

What are the consequences of not treating fibroids?

Most uterine fibroids that do not cause any problem can be left untreated. They are benign, and may remain the same size or grow very slowly, causing no symptoms to mild signs and symptoms. As the levels of reproductive hormones drop with menopause, the fibroids usually shrink in size.

When should I consider watchful waiting of fibroids?

Close monitoring is required when your fibroids are not causing any problems and treatment is stalled for further development. In rare cases, it can rapidly grow into a tumour or to sizes that can cause significant problems, and make surgical removal difficult and risky.

What are the treatment options for fibroids?

Treatment depends on the location, size and number of fibroids and may include:

Non-surgical treatments

- Medication: such as hormones, are used in combination to shrink the fibroids prior to surgery
- Uterine artery embolisation (UAE): blocking the blood supply to the fibroids and in turn causing them to shrink
- Endometrial ablation: removing the uterine lining containing the fibroid with the help of laser, heated wire loop or hot liquid in a balloon
- MRI-guided procedures: ultrasound or laser energy passed through small needles that are inserted under the guidance of MRI

Symptoms caused by uterine fibroids usually resolve by the time you reach menopause. Hence, if you are nearing menopause you can consider controlling symptoms with home treatment and medicine.

Menstrual Complications

The menstruation cycle begins in a woman at the stage of puberty and occurs at the interval of 28 days on average, however normal cycles can range from 21 to 35 days. The changes in hormones take place in the woman's body as the egg prepares to be released and the female organs prepare for a possible pregnancy.

Condition

Any deviation outside the range of what constitutes a normal menstrual period is considered a menstrual problem and might be due a variety of reasons, some of which are gynaecological conditions that need investigation.

Causes & Effects

Menstrual irregularities that may be observed are:

- Amenorrhea absence of menstrual periods.
- Dysmenorrhoea painful menstruation.
- Heavy menstrual bleeding
- Oligomenorrhoea irregular or frequent menstrual periods.

Some of the causes that menstrual irregularities may be due:

- Hormonal disturbance: PCOS, Endometriosis.
- Anatomical problems: uterine fibroids, adenomyosis, endometrial polyps.

After investigations and having reached a correct diagnosis an approach to treatment will depend if a woman desires to have more children.

Treatment

There are a range of treatment options available for women suffering menstrual complications, which will differ depending on the cause of the complications.

Treatment options

Some of the treatment options available:

- Oral contraception
- Intra-uterine Device (IUD)
- Endometrial ablation
- Myomectomy
- Endometrial polyp removal
- Total laparoscopic Hysterectomy (TLH)

If you suffer from menstrual problems, contact Dr Alex Polyakov to get an accurate diagnosis and discuss your treatment options.

Recurrent Miscarriage

Recurrent miscarriage is the loss of two or more consecutive pregnancies that have involuntarily ended before 20 weeks. To be called a miscarriage, these pregnancies should have been clinically-recognised on an ultrasound or pregnancy tissue found after the loss.

Condition

What are the common names for recurrent miscarriage?

Recurrent miscarriage can also be referred to as recurrent pregnancy loss, habitual abortion or multiple miscarriages.

What is the percentage of the population affected by recurrent miscarriage?

Recurrent miscarriage is about 15-20%. Early losses that occur even before a missed period may be as high as 30-50%. In women who have a history of two or more previous losses, the risk increases to about 40%. The risk of miscarriage increases with advancing maternal age. Evaluation should be instituted after 2 losses especially in the infertility population. About 5% of women will have at least 2 consecutive miscarriages while only 1% experience 3 or more.

Which part of the body is affected?

The female reproductive system is made up of the following parts:

- Vagina: opening of the reproductive system, which allows the entry of sperm
- Cervix: narrow region that connects the vagina to the uterus
- Uterus or womb: where a fertilised egg implants and grows to develop into a baby
- Ovaries: organs on either side of the uterus, which release an egg each month in the prospect of a pregnancy
- Fallopian tubes: narrow tubes that open out at the ovaries to pick up the released egg for fertilisation

Each month an egg is released from an ovary and is taken up by the fallopian tube. If it gets fertilised by sperm, the embryo travels to the uterus and implants in the uterine membrane. From here, it develops into a baby.

How does recurrent miscarriage affect you?

Recurrent miscarriages can take a toll on your physical and emotional wellbeing. It is usually associated with eager anticipation, hope and disappointment, followed by uncertainty, fear, anxiety and grief. You will also have to face the physical and emotional consequences of intense hormonal ups and downs.

What are the causes of a recurrent miscarriage?

Some of the causes of a recurrent miscarriage are:

- Genetic factors: chromosomal abnormalities in the foetus
- Structural abnormalities: structural defects in the uterus, polyps and submucous fibroids and Asherman's syndrome.
- Antiphospholipid syndrome: autoimmune disease associated with recurrent thrombosis (clot formation) in veins and arteries
- Hormonal imbalance: diabetes, abnormal thyroid function, high prolactin levels and decreased progesterone
- Placenta: defects in the formation of the placenta and microthrombi in the placental blood supply
- Severe infections: rare cause
- Lifestyle factors: alcohol, cigarette smoking, cocaine use and increased caffeine intake

Who is at risk of recurrent miscarriage?

Increasing maternal age is an independent risk factor for recurrent miscarriage. While you can have a 15% risk between ages 30 to 34 years, your risk can increase to 51% and 93% between the ages of 40 to 44 years and ≥45 years, respectively.

The number of previous miscarriages is another determining factor for recurrent miscarriages; with the risk increasing to about 40% following three earlier pregnancy losses.

What are the signs and symptoms of recurrent miscarriage?

The symptoms of a miscarriage are:

- Light or heavy vaginal bleeding that is irregular or constant
- Pain, including abdominal pain, pelvic cramps, or a dull persistent ache in your lower back
- Passing of blood clots or greyish foetal tissue from your vagina

What are the types of miscarriage?

Miscarriage can be of many types such as:

- Threatened abortion: early symptoms such as vaginal bleeding occurs, without any other symptoms
- Inevitable abortion: broken membranes or dilated cervix
- Incomplete abortion: only a part of the pregnancy tissue comes out, with some of it still in the uterus
- Complete spontaneous abortion: complete expulsion of the pregnancy tissue
- Missed abortion: foetus has died or not developed, but there are no symptoms of a miscarriage, and the pregnancy tissue remains in the uterus
- Septic abortion: foetal material has been infected before, during or after a miscarriage

How is the recurrent miscarriage diagnosed?

Your doctor may first review your medical, genetic, surgical and family history, and perform a thorough physical examination. If you have a high risk of genetic abnormalities, your doctor may order karyotyping of both parents. An ultrasound, saline ultrasound, MRI, hysteroscopy or hysterosalpingogram X-ray may be ordered to evaluate your uterus for abnormalities. Further tests such as amniocentesis (testing of the amniotic fluid), chorionic villus sampling (testing of the placenta) or preimplantation genetic diagnosis or PGD (egg and sperm are extracted, allowed to fuse in the lab and one cell of embryo is tested) may be ordered.

Treatment

What are the consequences of not treating recurrent miscarriage?

Left untreated, you may not be able to get pregnant.

What are the treatment options for recurrent miscarriage?

Treatment is centred around the underlying cause of recurrent miscarriage and may include:

- Medication to treat antiphospholipid syndrome
- Surgery for structural abnormalities
- Hormone therapy to treat conditions characterised by hormonal imbalances
- Treatment for couples with chromosomal abnormalities:
- Genetic counselling on future risks for recurrent miscarriage
- Preimplantation genetic diagnosis along with IVF
- Egg or sperm donation
- Adoption

What are the lifestyle recommendations to prevent recurrent miscarriage?

The lifestyle recommendations to prevent recurrent miscarriage are:

- Avoid smoking cigarettes
- Avoid cocaine
- Reduce alcohol intake

- Reduce excess caffeine intake

What is the current research regarding recurrent miscarriage?

Extensive research is being done to find better treatment options for recurrent miscarriage. Some of the recent studies are listed below:

- Matjila MJ, Hoffman A, van der Spuy ZM. Medical conditions associated with recurrent miscarriage-Is BMI the tip of the iceberg? Eur J Obstet Gynecol Reprod Biol. 2017 May 3;214:91-96.
- Ebina Y, Nishino Y, Deguchi M, Maesawa Y, Nakashima Y, Yamada H. Natural killer cell activity in women with recurrent miscarriage: Etiology and pregnancy outcome. J Reprod Immunol. 2017 Apr;120:42-47.
- Promberger R, Walch K, Seemann R, Pils S, Ott J. A Retrospective Study on the Association between Thyroid Autoantibodies with α 2-glycoprotein and Cardiolipin Antibodies in Recurrent Miscarriage. Iran J Allergy Asthma Immunol. 2017 Feb;16(1):72-76.
- Tur-Torres MH, Garrido-Gimenez C, Alijotas-Reig J. Genetics of recurrent miscarriage and fetal loss. Best Pract Res Clin Obstet Gynaecol. 2017 Mar 27.

Ovarian Cysts

Ovarian cysts are fluid-filled sacs that develop in the ovaries. They can affect women at any age, predominantly during the reproductive age.

Condition

What are the common names for ovarian cysts?

Ovarian cysts are also called cystic ovarian mass.

What is the percentage of the population affected by ovarian cysts?

It is estimated that 8 to 18% of women suffer from ovarian cysts.

How do ovarian cysts affect you?

Most ovarian cysts are harmless and cause little or no discomfort. However, large cysts can cause pain.

Which part of the body is affected?

The ovaries are paired organs that are a part of the female reproductive system. Situated on either side of the uterus, their main function is to produce ova and release sex hormones. Each month, one ovum matures, is released and picked up by the fallopian tubes for reproduction.

The ovaries develop cyst-like structures every month called follicles. Each follicle has an egg surrounded by fluid, which provides protection as it develops. When the egg matures, the follicle bursts open, releasing the egg and the fluid.

What are the types of ovarian cysts?

There are two types of ovarian cysts:

- Functional ovarian cysts are the most common. They do not cause any harm, are non-cancerous and short-lived.
- Pathological cysts may be benign or cancerous (malignant).

What are the causes of ovarian cysts?

The causes of ovarian cysts depend on the type.

Functional ovarian cysts

These cysts are associated with the monthly menstrual cycle. They form when

- fluid inside a follicle is not released at the time of egg release (corpus luteum cyst)
- the follicle swells up but doesn't release the egg (follicular cyst)

Pathological cysts

These cysts form as a result of abnormal cell growth of either the cells that form the egg or those that cover the ovary. They are not related to the menstrual cycle. Pathological cysts may include:

- Dermoid cysts: develop from cells that form the egg and can contain tissues such as skin, hair or teeth. These are usually benign.
- Cystadenomas: develop from cells that cover the ovary and are usually filled with liquid or mucous
- Endometriomas: develop when tissue lining the uterus, called endometrium, begins to grow outside the uterus and on the ovaries

Dermoid cysts and cystadenomas can grow big and shift the ovary from its normal position. This increases the chance of painful twisting of your ovary, a condition called ovarian torsion.

What are the signs and symptoms of ovarian cysts?

Some cysts do not show any signs or symptoms. If symptoms present, the most common is pain, which may be characterised as follows:

Pelvic pain before your period starts or before it ends

Dull pelvic ache that radiates down your lower back and thighs

Pain during intercourse

Pain with bowel movements

Other symptoms may include

- Nausea, vomiting or tenderness in your breast like that experienced during pregnancy
- Abdominal fullness or heaviness
- Urination problems due to pressure on your bladder

The symptoms that indicate an emergency include:

- Sudden extreme pelvic or abdominal pain
- Fever or vomiting that accompanies pain
- Shock
- Rapid breathing
- Weakness or light-headedness
- Ovarian torsion: painful twisting of the ovary when they grow large and move out of their usual position
- Rupture of a cyst, causing severe pain and internal bleeding

Cysts are common during pregnancy and can lead to complications such as torsion or rupture. Ovarian cysts present during pregnancy are closely monitored.

Can an ovarian cyst become cancerous?

Ovarian cysts are mostly benign, but some can become cancerous. The risk increases with age as postmenopausal women are at a higher risk for ovarian cancer.

Can ovarian cysts affect your chances of getting pregnant?

Ideally, ovarian cysts do not interfere with your fertility, but certain conditions associated with the cysts, such as endometriosis and polycystic ovarian syndrome (PCOS) can influence your chances of getting pregnant.

How are ovarian cysts diagnosed?

Ovarian cysts are usually detected during a pelvic exam. Other tests that could help in the diagnosis of cysts include a pregnancy test (for corpus luteum cysts), blood test to detect cancer protein, ultrasound and laparoscopy.

Treatment

What are the consequences of not treating ovarian cysts?

Some ovarian cysts do not require treatment as they resolve with time. However, some may lead to infection and infertility if left untreated.

When should I consider watchful waiting of ovarian cysts?

In most cases, if you don't have any symptoms, and your cysts are small and fluid-filled, you will be advised to wait. Your cysts will be closely monitored as most will resolve on their own.

What are the treatment options for ovarian cysts?

The main treatment options for ovarian cysts are:

- Birth control pills: reduces the risk of new cysts from forming and development of ovarian cancer
- The surgeries that may be performed include:
 - Ovarian cystectomy: removal of only the cyst, leaving the ovary intact
 - Oophorectomy: removal of cyst along with the affected ovary
 - Total hysterectomy: removal of both ovaries, fallopian tubes as well as the uterus. This is considered if the cyst is cancerous.

Polycystic Ovaries (PCOS)

Polycystic ovarian syndrome (PCOS) is a condition of unknown cause. It is associated with problems such as irregular (usually less frequent) menstrual cycles, excessive hair growth, acne, obesity, infertility and the possible development of diabetes and osteoporosis. Treatment for PCOS depends on the associated problems and can include weight reduction, hormones or in some cases an operation.

Polycystic Ovaries

Ovarian hormones

Normally, the ovary produces large amounts of the female hormone oestrogen, lesser amounts of the male hormone testosterone, and the pregnancy hormone progesterone (which is only produced in greater amounts after ovulation and during pregnancy). In PCOS, testosterone levels may be mildly increased.

Causes of PCOS

The causes of PCOS are unknown. In some cases, it seems to run in the family; for other women, the condition only occurs when they are overweight. Recent research suggests that PCOS is related to insulin resistance and the development of diabetes, especially in women who are overweight.

Women who have PCOS may have problems such as

- Irregular menstrual cycles menstruation may be less frequent due to less frequent ovulation, and may be either heavier or lighter than average
- Amenorrhoea some women with PCOS do not menstruate, in some cases for many years
- Obesity the cause of this is unclear
- Excessive hair growth may be due to increased testosterone
- Acne the cause is unclear
- Infertility related to less frequent or absent ovulation

There may also be long term health risks. Some women with PCOS develop diabetes, especially if overweight. Women with infrequent periods are at risk of osteoporosis.

Diagnosing polycystic ovarian syndrome

PCOS is usually diagnosed based on the woman's history and an examination. It may be confirmed by ultrasound and by measuring hormone levels in the blood. Early diagnosis is important, as it will allow symptoms to be managed and may prevent long term health problems from developing.

Treating PCOS

It is important that a broad approach (by a general practitioner with interest or expertise in this area, or perhaps involving several specialists for example, an endocrinologist or a gynaecologist) be used to manage and treat PCOS. If only one or two symptoms are addressed on a short term basis, the woman may be left with long term clinical problems.

The treatment for PCOS will depend on the problems the woman has. For example, if the woman is suffering from irregular, heavy periods, the oral contraceptive pill is often prescribed to regulate the cycle and prevent the lining of the womb from overgrowing. If the woman has infrequent periods, the oral contraceptive pill is used to reduce the risk of osteoporosis. If infertility is a problem, clomiphene citrate may be given orally to induce ovulation. Weight loss is very important, as it will reduce the risk of diabetes developing and can reduce other symptoms. An operation called ovarian drilling can be used to treat women with PCOS who want to become pregnant and are not ovulating.

Pelvic Inflammatory Disease (PID)

Pelvic inflammatory disease (PID) is an infection of the reproductive organs of women.

What is pelvic inflammatory disease?

Pelvic inflammatory disease (PID) is an infection of the reproductive organs of women.

This may include infection of

- The Uterus (womb)
- The Cervix (the opening of the womb into the vagina)
- The fallopian tubes (these are the tiny tubes between the ovary and the womb eggs released by the ovary pass through these tubes)
- The ovaries

The infections that can cause PID include

- Gonorrhoea
- Chlamydia
- Other bacteria

PID can cause severe illnesses in a woman, requiring treatment in hospital. However, sometimes PID can occur without causing any signs or symptoms. That is, the woman may not feel sick and may not notice any change in her body. PID is a very serious disease because it can lead to long term problems.

PID is one of the leading causes of infertility in women. Women who have had PID may have difficulty becoming pregnant and if they do become pregnant, there may be problems with the pregnancy.

Risk factors

The primary risk factor for PID is infection with a sexually transmitted infection (STI) in particular, Chlamydia and gonorrhoea.

Risk factors for these STIs include

- Engaging in unsafe sex
- Having sex with more than one partner
- Being in a sexual relationship with someone who has multiple sex partners
- If you have recently been treated or are being treated for an STI, you must make sure your sex partner(s) also receives treatment in order to prevent getting infected again. Sex partners should receive treatment even if they do not have any symptoms.
- If you or your partner have more than one sexual partner and do not use condoms, have regular sexual health checkups.

Symptoms

Women can have PID without any signs or symptoms. Women may notice

- Pain low in the abdomen
- Pain during sex
- Abnormal periods (women on the pill may notice this too)
- Bleeding after sex
- Abnormal discharge
- Fever
- Some women become very sick and have severe pain

If you have symptoms suggestive of an STI or think you may have been exposed to one, you should seek medical attention immediately.

Prevention

PID can be prevented by avoiding risky sexual behaviours. To reduce your risk

- Limit your number of sex partners: If you have recently been treated or are being treated for an STI, you must make sure your sex partner(s) also receives treatment in order to prevent getting infected again. Sex partners should receive treatment even if they do not have any symptoms.
- Practice Safe Sex: Always using condoms when you have vaginal or anal sex is the best way to avoid getting PID. Using water-based lubricant with condoms is recommended. This reduces the risk of the condom breaking and increases both partners' enjoyment of sex. Oil based lubricants (such as Vaseline) should not be used. They weaken the condom and may cause it to break. If you are giving a man oral sex (his penis in your mouth) then he will need to wear a condom. It does not matter whether you are male or female, if you put your mouth in contact with your partner's anus or vulva while having sex you will need to use a dental dam.
- There are lots of ways to enjoy physical intimacy with your partner. Explore other ways to be intimate, which do not put you at risk of sexually transmitted infections or an unintended pregnancy.
- If you are having unprotected sex, talk to your sexual partner about the risks involved (while some sexually transmitted infections can be cured, others cannot. Don't forget that by having unprotected sex, you are at risk of being exposed to HIV). By having a good discussion with your partner you may be able to come to a clear agreement about using condoms.

- If you tend to forget using a condom after drinking alcohol or taking other drugs, it may be time to seriously think about the risks involved. While some may think it is unrealistic not to enjoy a drink, there are many ways of cutting down and staying in control so they can make more rational choices about their sexual contact.
- Remember that using condoms not only protects you from STIs, it also is an effective form of contraception. If you do use other forms of contraception (like the pill, diaphragm and IUCD), use condoms as well.

If you or your partner have more than one sexual partner and do not use condoms, have regular sexual health checkups.

If you think you may have been at risk of getting a sexually transmissible infection, you may be at risk of having PID. Have a sexual health check to be sure.

Diagnosis

The doctor can test for PID by

- Examining and taking swabs from your vagina and cervix
- Testing urine for chlamydia and gonorrhoea
- Feeling the cervix, uterus and ovaries for any sign of tenderness or pain
- Doing blood tests

If you find out that you do have PID, anyone you have had sex with in the past few months will need to be tested and treated also. This is to make sure that they are cleared of the infection and to prevent you from getting the infection again and needing treatment all over again. If you feel uncomfortable or embarrassed about telling your partner or partners, the doctor or nurse can contact them. This is a confidential process and your name will not be mentioned. This is very important for your health, for your partners health, and the health of other people they have sex with.

How can you be treated for pelvic inflammatory disease?

PID is treated with antibiotics. Sometimes three different antibiotics are given.

To ensure the infection has been cured

- It is important to take all the tablets otherwise the infection may not be properly cured
- You will be asked to return to Dr Alex Polyakov or the clinic for follow-up appointments this will include checking that signs of infection are settling. After you have finished the treatment there will be tests to check the infection is cured
- It is best not to have sex until the tablets are finished and you have been tested for complete cure of the infection (even if you feel better)

Sexual partners who have the infection should be treated at the same time otherwise you may get the infection again.

If a woman is very sick with PID, she may need to be admitted to hospital for treatment.

Surgery

Microsurgery

Microsurgery is a type of surgery that uses an operating microscope to help amplify the operating field. These microscopes can magnify very small structures 5 to 40-fold and help the surgeon perform intricate procedures for the best possible outcomes.

Microsurgical procedures currently have wide applications in medicine and are used for treating various conditions. These high-standard minimally invasive surgical procedures can also be employed in male and female infertility treatment to clear blocked tubes and remove scar tissue around the tubes, ovaries and uterus. These are usually performed on an outpatient basis. Two such procedures include microsurgical tubal ligation reversal and vasectomy reversal.

Tubal ligation reversal

Tubal ligation reversal is a surgery conducted to reconnect fallopian tubes (through which eggs pass from ovaries) that were tied up in a previous procedure (tubal ligation), and restore lost fertility.

Procedure: Under general anaesthesia, your surgeon inserts a laparoscope (small instrument with a light and camera) through your navel to evaluate the reversibility of the tubes. A small incision, known as bikini cut is made near the pubic hair line, and an operating microscope is used to reconnect the remaining ends of the fallopian tubes with fine sutures. At the end of the procedure, the surgical incisions are protected with skin tapes and a soft dressing pad is placed.

Vasectomy reversal

Vasectomy reversal is a surgical procedure where the ends of the vas deferens (sperm carrying tubes), which were cut and sealed in a previous procedure (vasectomy), are joined back together to enable reproduction.

Procedure: Vasectomy reversal is a more complex procedure than vasectomy and is generally carried out under general anesthesia. The surgeon makes a small incision in the skin of the scrotum (sac containing the testes), and retracts the surrounding structures to expose the testicle. Each vas deferens is carefully cut and inspected for the presence of sperm in the semen. The procedures that can be performed based on this include

- Vasovasostomy: Involves the reconnection of the separated ends of the vas deference
- Vasoepididymostomy: Involves the connection of the detached vas deferens to the epididymis (a tube that temporarily stores sperm)

Your surgeon will decide on which surgery is best suited for you. In some cases, your surgeon will perform both procedures, one on each side.

When your surgeon confirms the presence of sperm, the tubes are reconnected to enable the transit of sperm. In cases where seminal fluid has few or no sperm, vasoepididymostomy would be performed in a similar manner, except the detached vas deferens would be connected to the epididymis. Your incisions will then be sutured and covered with a bandage to help in healing.

Advantages

The reconnection of the vas deferens in the above techniques is done with the help of an operating microscope, which allows the surgeon to manipulate stitches that need to be finer than the traditional stitches.

Advantages of microsurgical procedures are:

- Small incisions
- Less postoperative pain
- Minimal damage to the surrounding structures
- Quick recovery
- Shorter hospitalisation period

Endoscopy

Endoscopic surgery is a minimally invasive surgical procedure performed using an endoscope, a thin instrument with camera and a lighted device attached to it.

Introduction

Endoscopy is conducted through openings of the body like the vagina, or by laparoscopy, where small incisions are made. Surgeons need to be well-trained and experienced to perform endoscopic surgeries.

Endoscopes currently have wide applications in medicine as they can be used for diagnosing and treating various conditions. Gynaecologic endoscopic surgery is indicated for:

- Endometriosis
- Benign ovarian cysts
- Residual ovary syndrome
- Uterine fibroids
- Polyps
- Pelvic pain

Surgical procedure

Endoscopic surgeries are usually performed under general anaesthesia. During the procedure, your surgeon makes small incisions to introduce the endoscope and miniature surgical instruments (laparoscopy) or will insert the instruments through a natural opening (hysteroscopy). The light attached to the scope illuminates the relevant area and the camera displays the internal structures on a monitor. This helps the surgeon to evaluate the abnormality and direct the surgical instruments to repair or remove the degenerated tissue. At the end of laparoscopy, the surgical incisions are closed by sutures and a dressing pad is applied.

Advantages of endoscopic surgery when compared with the conventional surgery include

- Smaller incisions
- Less scarring
- Reduced operating time
- Less postoperative pain and discomfort
- Minimal damage to the surrounding structures
- Quick recovery and return to normal activities
- Usually performed as an outpatient procedure

Myomectomy

Uterine fibroids are very common benign growths that more than 50 per cent of women will experience. While they are mostly harmless, they can pose health complications and fertility risks.

Myomectomy for uterine fibroids

Following comprehensive diagnosis, Dr Alex can perform a myomectomy, a procedure that is performed laparoscopically or abdominally. In many cases, this surgery can effectively extract fibroids without having to remove the uterus. In most cases this can be done through key-hole surgery with minimal scarring and fast recovery.

Am I a candidate for fibroid surgery?

You may be a candidate for surgical treatment in the following cases:

- Do not respond to conservative treatments
- Post menopause, with growing tumours
- Grow large enough to cause pressure on other organs, such as the bladder

- Grow rapidly
- Profuse bleeding that can lead to anaemia and lifestyle problems
- Chronic abdominal pain, or pelvic or lower back pressure
- Cause problems with regard to fertility

How do I prepare for surgery?

You will be advised to stop eating or drinking anything at least 6 hours before the procedure. Discuss all the medications that you are taking on a regular basis so that your doctor can advise you on the ones that you can safely continue and those that may need to be stopped during the time of surgery.

How is surgery for fibroids performed?

Fibroid surgery can be performed by an open or minimally invasive laparoscopic approach. While open surgery requires a large incision on your abdomen to access the fibroids, laparoscopy requires only small incisions to allow the insertion of surgical instruments and a narrow lighted tube with a camera, called a laparoscope. The scope relays images of the surgical site onto a large monitor, which can be viewed by your surgeon.

What is laparoscopic myomectomy?

Laparoscopic myomectomy is a minimally invasive surgical procedure performed to excise uterine fibroids.

Your surgeon will cut the fibroid into pieces using laser, cryotherapy (extreme cold) or cautery (extreme heat), and remove them through a small incision made in the abdominal wall. A larger incision is required if the fibroid is removed without being cut into pieces. In some cases, the fibroid is removed through the vagina by a process called colpotomy.

Following the excision, the defects are irrigated to control bleeding and sutured.

Hysterectomy

Your surgeon separates the uterus from the surrounding organs and blood vessels, by ligating and sealing the open ends. The uterus is then removed via the abdominal incision or vagina. Your surgeon will also remove the ovaries only if you have a risk of developing ovarian or breast cancer. Usually, the ovaries are spared.

What can I expect after surgery?

Following laparoscopic surgery, you may be able to go home after a nights stay in the hospital. An open approach may require a longer stay. You will be prescribed pain medication to keep you comfortable and advised to move around after the surgery.

What are the pros and cons of fibroid removal surgeries?

The laparoscopic approach to fibroid treatment is associated with more advantages than open surgery. These include:

- Less blood loss
- Lower postoperative pain
- Fewer complications
- Faster recovery
- Minimal scar formation

An added advantage of myomectomy is the ability to preserve your fertility. However, laparoscopic myomectomy may be associated with challenges in suturing the defect left after the removal of the fibroid

as well as the detection and removal of small uterine fibroids, and large fibroids from difficult locations such as lower region of the uterus or junction of the cervix.

On the other hand, while you will not be able to conceive in the future after hysterectomy, the complete removal of the uterus and sometimes the ovaries as well, ensures complete cure of fibroids.

Describe the stages of recovery and care plan?

You can start exercising 2-4 weeks after surgery and have intercourse 8 weeks after surgery. Give your uterus at least three months to heal before attempting to get pregnant after myomectomy. You are advised not to lift any heavy object until 2-4 weeks after surgery.

If your ovaries are removed as well, you will be prescribed hormone therapy to avoid premature menopause and the symptoms such as hot flashes, that are associated with it.

What are the potential complications of fibroid removal surgery?

As with most surgical procedures, fibroid removal surgeries may be associated with certain complications such as:

- Infection
- Bleeding
- Blood clots
- Conversion to an open surgery
- Hernia
- Bowel obstruction
- Injury to neighbouring organs (ureter, bladder, bowel or blood vessels)
- Recurrence
- Chances of uterine rupture during labour

What is the downtime of fibroid removal surgery?

You will usually be able to resume your normal work within a week. If you engage in physically demanding work, you are advised to take rest for 2 to 3 weeks.

What is the cost of fibroid removal surgery?

Any costs involved will be discussed with you prior to your surgery.

What is the likelihood of fibroid recurrence? How can it be managed?

Fibroids can recur even after surgery. This may require further surgery.

What are the lifestyle recommendations to manage fibroids?

Menstrual pain caused by fibroids can be managed with:

- Exercise
- Using pads instead of tampons
- Rest
- Heat application

Advanced Endometriosis Surgery

Advanced endometriosis surgery

Am I a candidate for surgery?

You may be considered for surgery to treat endometriosis if you

- Suffer from severe pain that is not relieved with conservative methods
- Suffer from infertility because of endometriosis and decide to get pregnant

What are the indications of the different types of surgeries?

Your surgeon will consider conservative surgery when you wish to get pregnant in the future. Laparoscopy is usually the first approach considered for conservative surgery. Laparotomy is suggested only if the endometriosis is extensive, severe and the anatomy is distorted as some of the organs get stuck together.

Radical surgery on the other hand is performed in severe cases, when you do not wish to have any children.

How do I prepare for surgery?

Before endometriosis surgery, you will be advised not to eat or drink anything for six hours prior to your procedure. You may be given a solution to drink to clear your bowels.

How is surgery performed?

Surgery can be performed by the following methods:

Laparoscopy

The laparoscopic procedure when performed for diagnosis can be continued to treat the endometriosis as well. This is a minimally invasive surgery that is performed with the help of a laparoscope, which is a thin long lighted tube with a camera attached. The laparoscope can be inserted at the surgical site through a tiny incision made on your skin. The images captured on the camera can be relayed on a large monitor for your surgeon to view. A harmless gas is injected to inflate the abdomen, allowing for a clear view of the organs.

Two more small incisions are made to allow the insertion of other surgical instruments such as a laser to excise or cauterise the endometrial implants (destroy with intense heat and seal off the blood vessels). Scar tissue may also be removed. Your surgeon ensures that the surrounding healthy organs are not harmed.

Laparotomy

This involves the removal of the endometriosis tissue through a long incision made along the bikini line. It is more invasive than the laparoscopic procedure. Sometimes, a laparoscopic procedure gets converted into a laparotomy in the event of a surgical complication.

Radical surgery

Hysterectomy is a radical surgery that involves the removal of the uterus. Oophorectomy is a radical surgery that involves the removal of the ovaries.

Bowel resection

Bowel resection is performed if the bowel has also developed endometriotic adhesions. Your surgeon may perform one of three depending on your condition:

- If the endometriosis lesion is small, it can be shaved off, leaving the bowel intact.
- A circular section of the bowel containing the endometriosis can be cut and the resulting hole closed.
- For deeper endometriosis, a section or segment of affected bowel is excised and the remaining sections of the bowel are re-joined.

- In case of complications such as leakage at the region of the bowel that is re-joined, a process called colostomy may be performed temporarily, where the excised end of the colon is diverted to an opening created in the abdominal wall.

Depending on the recurrence of endometriosis, you may require repeat surgeries.

What are the advantages and disadvantages of the different types of treatments?

While hormonal therapy can help easily relieve pain, many may not help you become pregnant and may be associated with side effects such as acne, cramps, hot flushes, mood swings and weight gain.

When considering surgery for the treatment of endometriosis, the minimally invasive laparoscopic procedure is associated with certain procedure-related advantages such as:

- Smaller incisions
- Less post-operative pain and discomfort
- Faster recovery
- Shorter hospital stay
- Earlier return to normal activities
- Smaller scars
- Minimal internal scarring
- Provides a definite diagnosis
- Ascertains long-term relief in 70% of women
- Does not require long-term use of medication

However, it may not be useful to treat all forms of endometriosis and it has a recurrence rate of 30%.

Laparotomy may be able to treat more extensive endometriosis and related complications but is associated with risks and complications of an open surgery and disadvantages such as:

- Longer recovery
- More post-operative pain
- Larger scar formation when compared to laparoscopy

Hysterectomy helps achieve a 90% cure long-term, without the need for medications, but the biggest disadvantage is the inability to achieve pregnancy. You may also need hormone replacement therapy if your ovaries are also removed.

What are the outcomes of endometriosis surgery?

Surgery cannot cure endometriosis. It can offer significant but short-term pain relief. However, removal of deep endometriosis tissue can lead to long-term pain relief.

What are the potential complications of endometriosis treatment?

As with most treatments, the various treatments for endometriosis can be associated with certain side effects and complications such as:

Endometriosis medication can cause side effects such as bleeding, bloating, nausea, skin changes, elevation in BP, weight gain and depression.

Surgery can be associated with complications such as damage to nearby organs or large blood vessels, infection, bleeding or blood clots.

What is the prognosis of endometriosis treatment?

Endometriosis treatment cannot completely cure endometriosis, but long-term prognosis of endometriosis treatment should consider three important parameters:

- Management of symptoms
- Rate of recurrence
- Achievement of pregnancy

Endometriosis can recur, necessitating repeat surgery or management with hormone therapy. However, most patients can experience a good quality of life and conceive with treatment. In some cases, you may have to consider IVF to help you get pregnant.

What is the cost of endometriosis surgery?

Any costs involved will be discussed with you prior to your surgery.

What is the likelihood of endometriosis recurrence? How can it be managed?

While surgery is effective in alleviating pain, endometriosis can recur 40% of the time after conservative surgery. Thus, ongoing medical treatment is recommended. The chance of recurrence is more in severe cases.

How can endometriosis be prevented?

Since the exact cause of endometriosis is not certain, it is not clear how the condition can be prevented.

What are the lifestyle recommendations to manage pain related to endometriosis?

Regular exercise, relaxation, rest, meditation, hot water bottle, warm baths and eating healthy to prevent constipation can help relieve pelvic cramping and pain.

What is the current research regarding endometriosis treatment?

Extensive research is being done to find better treatment options for endometriosis. Some of the recent studies are listed below:

- Aznaurova YB, Zhumataev MB, Roberts TK, Aliper AM, Zhavoronkov AA. Molecular aspects of development and regulation of endometriosis. *Reprod Biol Endocrinol*. 2014; 12: 50.
- Morotti M, Vincent K, Brawn J, Zondervan KT, Becker CM. Peripheral changes in endometriosis-associated pain. *Hum Reprod Update*. 2014 Sep-Oct; 20(5): 717736.
- Hughes CL, Foster WG, Agarwal SK. The Impact of Endometriosis across the Lifespan of Women: Foreseeable Research and Therapeutic Prospects. *Biomed Res Int*. 2015; 2015: 158490.

Hysterectomy

The removal of the uterus or womb. It is recommended as a treatment for heavy bleeding, irregular bleeding, fibroids, prolapse and painful periods (endometriosis, adenomyosis). Hysterectomy is also performed in the treatment of various gynaecological cancers.

There are three types of hysterectomy

- Total Laparoscopic Hysterectomy
- Vaginal Hysterectomy
- Abdominal Hysterectomy

Total Laparoscopic Hysterectomy

Dr Polyakov has particular expertise in Total laparoscopic hysterectomy after having trained and worked in an advanced laparoscopic unit for many years.

What is total Laparoscopic Hysterectomy?

Total laparoscopic hysterectomy is a surgical procedure for the removal of the uterus and cervix. In this technique, the uterus is separated from its attachments to the pelvis and removed through the vagina. The ovaries and fallopian tubes can also be removed. Dr Polyakov will discuss this with you

Why is a Laparoscopic Hysterectomy Performed?

Total laparoscopic hysterectomy is done to treat conditions such as painful or heavy menstrual periods, pelvic pain, fibroids or may be performed as a part of cancer treatment. You should clearly understand the reason for this surgery.

What can be expected during the recovery period?

You will be in the recovery room when you wake up from anesthesia. You may feel sleepy for the next few hours. You may have pain in the shoulder or back which is because of the gas used in the procedure. It resolves within a day or two. You will start eating and drinking normally within a short period of time.

You may have some discomfort or feel tired for a few days after the procedure. Constipation is very common. You will be in hospital for two days following the procedure. Dr Polyakov will ensure that your stay in hospital is as comfortable as possible.

Contact Dr Polyakov if pain and nausea does not go away or is becoming worse. You should avoid strenuous activities or exercise until you recover completely. Most women will take two weeks off work and return to work at the start of the third week. Dr Polyakov will review you again one week after your discharge from hospital.

You may have some vaginal discharge (old blood) for several days after the procedure. You can return to normal activity after two weeks but complete recovery may take longer. After the procedure, you will no longer be menstruating and be unable to conceive. Avoid intercourse for 6 weeks to allow top of vagina adequate time to heal.

Many women are concerned by a possible change to sex. Many women can feel liberated now they are free of troublesome bleeding, pain with periods, discomfort from prolapse and no further need for contraception. Libido can be improved with an improvement in wellbeing.

Possible Risks Of A Laparoscopic Hysterectomy?

As with any surgical procedure, there are associated risks and complications which include:

- Problems due to the anaesthesia
- Injury to the internal organs - 1/1000 risk of inadvertent damage to bladder, bowel or ureter
- Bleeding
- Infection

Any specific risks and complications will be discussed prior to the procedure.

Ask for a second opinion

Dr Polyakov performs 99% of hysterectomies as a Total Laparoscopic Hysterectomy procedure. Laparoscopic hysterectomy has benefits such as shorter recovery period, with faster return to usual activities, reduced postoperative pain, minimal scarring and less risk of postoperative adhesions. Few gynaecologists have the

skills necessary to perform a Total laparoscopic hysterectomy. Most hysterectomies in Australia are still performed open (Open Abdominal Hysterectomy).

Please make an appointment to see me for a second opinion if you have been advised to have an Open Abdominal Hysterectomy and before you commit to having a large scar.

Are there other alternatives to this treatment?

There are other conservative interventions which may be appropriate for your particular condition. Dr Polyakov will discuss the other options with you to help you make a well informed decision regarding what is right for you.

Dr Polyakov will discuss with you the role for removal of the ovaries. Removal of the ovaries is recommended for women over the age of 50 years. If the ovaries are not removed you will not experience menopausal symptoms including hot flushes and night sweats.

How is a Laparoscopic Hysterectomy Performed?

The procedure is done under general anesthesia in the operating room. A small incision is made just below your umbilicus. The abdomen is inflated with gas and a fibre-optic instrument called laparoscope is inserted to view the internal organs.

Three other small incisions are made on your abdomen through which tiny surgical instruments are passed. Then, the uterus, cervix and tubes are removed along with or without both ovaries.

The current recommendation is to concurrently remove both tubes as this has been shown to be associated with a lower incidence of ovarian cancer. Total operating time is about 90 minutes.

What precautions should be taken before a Laparoscopic Hysterectomy?

You can continue taking your regular medications, unless Dr Polyakov advises otherwise. If you take non steroidal anti-inflammatory medication Dr Polyakov will recommend that you discontinue this one week prior to surgery.

You will need to have a bowel preparation which will empty your bowel before the surgery. For this, you should be on a liquid diet (soups, jellies, juices or similar drinks) for 24 hours before the surgery. Our Practice Manager will provide you with instructions on this.

You will be admitted to hospital on the day of your operation. You will meet the anaesthetist to discuss the anaesthetic and any concerns you may have.

Vaginal Hysterectomy

What is Vaginal Hysterectomy?

Vaginal hysterectomy is an alternative surgical procedure to abdominal hysterectomy. In this procedure, the uterus is removed through the vagina rather than through the incision in the abdomen.

What are the advantages of the vaginal hysterectomy over abdominal hysterectomy?

Recovery following vaginal hysterectomy is much faster than abdominal hysterectomy. You may be discharged from the hospital in a day or two and you can return to your daily activities within a few weeks after the surgery.

Who are the good candidates for Vaginal Hysterectomy?

Individuals with the following conditions and those who don't have an enlarged uterus are considered as eligible candidates for vaginal hysterectomy.

Missing content

How is Vaginal Hysterectomy performed?

You may be given general or regional anaesthesia. An incision is made in the vagina and the uterus is removed through it. The incision in the vagina is then closed with absorbable stitches.

What are the risks of the Vaginal Hysterectomy?

Vaginal hysterectomy is generally safe. Complications may include infection, blood loss, blood clot usually in the leg vein or damage to the nearby organs in the abdomen and pelvic region such as urinary bladder, ureter or bowel. Obesity, diabetes and high blood pressure increase the chances of complications due to surgery.

What to expect after the Vaginal Hysterectomy?

Recovery after vaginal hysterectomy is fast. Medicines are prescribed for pain and to prevent infection.

Bleeding from the vagina is normal and will last for a few weeks after the surgery. Use of sanitary pads should be preferred as tampons increase the risk of infection. You will not have periods and cannot conceive after the vaginal hysterectomy.

If ovaries and fallopian tubes are removed along with uterus in vaginal hysterectomy you may have vaginal dryness or hot flushes, the symptoms of menopause.

These may be treated with medicines, if required. You will be able to do normal activities in around two weeks after the surgery, but should not lift heavy objects or have vaginal intercourse until the sixth week post operatively.

What if I have problems during the recovery period?

You should seek immediate medical attention if you experience any of the below mentioned conditions:

- Fever
- Offensive vaginal discharge or heavy bleeding
- Severe nausea or vomiting
- Inability to empty your bladder or bowels
- Severe pain

Abdominal Hysterectomy

A 10 cm incision is made in the lower abdomen. This is performed if the uterus is significantly enlarged by numerous fibroids or if there is gross pelvic pathology including adhesions. It is also performed in cases of cancer.

What Are The Advantages Of Abdominal Hysterectomy?

The main advantage is to the surgeon who has greater access to the pelvis. The procedure lasts about 60-90 minutes.

What Can I Expect From An Abdominal Hysterectomy?

You will be in the hospital for about 3 days. It will be about 4 weeks to recover at home. Most women will return to work by the start of the 5th week.

Ovarian Cyst Surgery

Am I a candidate for ovarian cyst surgery?

Your surgeon may suggest ovarian cystectomy in the following cases:

- Cyst is larger than 7.6 cm
- Not a functional cyst
- Cyst continues to grow
- Cyst does not resolve within two to three menstrual cycles
- Presence of pain or other symptoms
- Exclusion of ovarian cancer
- Cysts in both ovaries
- Ovarian cysts present in:
 - Menarchal adolescents and adults
 - Post-menopausal women
 - Those using birth control pills

How do I prepare for ovarian cyst surgery?

Before ovarian cyst surgery, you will be advised to stop eating or drinking anything at least 6 hours before the procedure. Discuss all the medications that you are taking on a regular basis so that your doctor can advise you on the ones that you can safely continue and those that may need to be stopped during the time of surgery.

How are the different ovarian cyst surgeries performed?

Ovarian cyst surgeries can be performed by two approaches:

Laparoscopy

Two to 3 small incisions are made on your abdomen. Carbon dioxide gas is introduced to inflate your abdomen so that the surgical area can be viewed clearly. A laparoscope (a narrow lighted tube with a camera) is inserted through one of the incisions to guide your surgeon with the help of images relayed on a large monitor. Other surgical instruments are inserted through the other incisions.

Laparotomy

A single large incision is made on your abdomen to access the surgical site. This method is considered when large cysts need to be removed, and when the whole ovary or uterus must be removed.

Using these approaches, the different types of surgeries that can be performed are briefed below.

Ovarian cystectomy

Ovarian cystectomy is performed under general anaesthesia. The cysts are carefully excised from the ovary, ensuring the contents do not spill out. Once freed from the ovary, the cyst is opened and the contents aspirated to reduce its size. The deflated cyst is then removed through one of the abdominal incisions.

Alternatively, the intact cyst can be removed through the vagina or it can be collected and decompressed within a retrieval bag, minimising the chance of spillage of the cysts contents within the pelvic cavity.

Oophorectomy

The affected ovary is separated from the surrounding tissues and blood supply. It is either removed through the incision or it is placed in a pouch before removal.

Hysterectomy

Your surgeon separates the uterus from the surrounding organs and blood vessels, by ligating and sealing the open ends. The uterus is then removed via the abdominal incision or vagina. Along with the uterus, your surgeon will remove the ovaries as well.

What can I expect after ovarian cyst surgery?

Following ovarian cyst surgery, you will be given medication to relieve pain and discomfort. If a laparoscopic approach was done, you may experience back and shoulder pain as a result of the carbon dioxide gas used. This will resolve with time. You may also have spotting or vaginal discharge.

What are the advantages of ovarian cyst surgery?

The advantages of a laparoscopy over laparotomy are:

- Smaller incisions
- Reduced blood loss
- Less scarring
- Lower post-operative pain
- Shorter hospital stay and recovery

Describe the stages of recovery and care plan

During your recovery, alert your doctor if you notice any of the symptoms below that may indicate an infection:

- Severe pain or abdominal swelling
- Fever
- Heavy bleeding, or dark or smelly vaginal discharge

What are the outcomes of ovarian cyst surgery?

Ovarian cystectomy can help remove ovarian cysts while preserving fertility, but does not stop other cysts from forming.

What are the potential complications of ovarian cyst surgery?

As with most surgeries, ovarian cyst surgery may be associated with potential complications such as:

- Bleeding
- Infection
- Damage to neighbouring organs such as bowel, ureters and bladder
- Need for further surgery

What is the downtime of ovarian cyst surgery?

If you have undergone a laparoscopic procedure, you will be able to get back to your daily routine in about 2 weeks; however, you may require about 6 to 8 weeks following a laparotomy.

What is the prognosis of ovarian cyst surgery?

Since there are chances of recurrence, regular monitoring of the ovaries is advised.

What is the cost of ovarian cyst surgery?

Any costs involved will be discussed with you prior to your surgery.

What is the likelihood of ovarian cyst recurrence? How can it be managed?

There is a 6 to 10% risk of recurrence and would require surgical removal of the cyst.

How can ovarian cysts be prevented?

Further formation of ovarian cysts can be prevented with the use of oral contraceptives, which also protect against ovarian cancer.

What is the current research regarding ovarian cysts?

Extensive research is being done to find better treatment options for ovarian cysts. Some of the recent studies are listed below:

- Clark M, Zigras T, Bayat L, Kashani S. Minimally Invasive Non-Laparoscopic Ovarian Cystectomy: A Unique Way to Approach Large Ovarian Cysts. J Minim Invasive Gynecol. 2015 Nov-Dec;22(6S):S150.
- Mehdizadeh Kashi A, Chaichian S, Ariana S, et al. The impact of laparoscopic cystectomy on ovarian reserve in patients with unilateral and bilateral endometrioma. Int J Gynaecol Obstet. 2017 Feb;136(2):200-204.

Laparoscopic "Keyhole" surgery

Laparoscopy is a minimally invasive surgical procedure performed using a laparoscope, a thin fibre-optic instrument with camera and lens attached to it. The laparoscope can be used for diagnosing and treating various conditions.

Laparoscopy in gynaecology is used to check for any abnormalities in the uterus, ovaries, fallopian tubes, and other organs which are not evident by other diagnostic procedures such as X-rays and other scans. Laparoscopy is used to diagnose and treat the conditions of pelvic pain, infertility, fibroids, cysts, tumours, endometriosis, ectopic (tubal) pregnancies, pelvic inflammatory disease and other gynaecological problems.

Pelvic pain is a characteristic symptom of various gynaecological conditions. Assessing the exact cause for pain is essential to treat the condition. Use of laparoscopy helps in assessing the exact cause of the pain such as presence of scar tissue, infections, ovarian cysts, gastrointestinal problems, urinary problems, musculoskeletal problems and other conditions.

During the procedure, your surgeon makes a small incision in the abdomen, usually at or below the belly button, and inserts a tube through which the laparoscope is introduced into the abdomen. Laparoscopy helps in examining the pelvis and the images can be viewed on a large screen. A special contrast dye may also be injected before the procedure for better visualisation of the fallopian tubes. After the procedure, the incisions are closed with stitches and covered with bandages.

Infertility

Fertility testing

Dr Alex Polyakov is a fertility specialist in Melbourne who has built a reputation as a doctor who combines his experience as a surgeon, obstetrician and gynaecologist with his expertise in reproductive endocrinology. He specialises in women's fertility and also provides male infertility treatment.

Infertility Specialists - Dr Alex Polyakov

If you have been trying to get pregnant for more than a year and have not yet succeeded, Dr Polyakov can assist you in everything from fertility testing and treatment options.

Fertility is the capability of women to achieve pregnancy. Women aged below 35 years who fail to conceive after 12-months of contraceptive-free intercourse are considered as infertile.

Infertility is usually defined as not being able to get pregnant despite trying for one year. A broader view of infertility includes not being able to carry a pregnancy to term and have a baby.

Pregnancy is the result of a chain of events. A woman's fertility often depends on her body's ability to release an egg from one of her ovaries (ovulation). The egg must travel through a fallopian tube toward her uterus (womb). A man's sperm must join with (fertilise) the egg along the way. The fertilised egg must then become attached to the inside of the uterus.

While this may seem simple, many things can happen to prevent pregnancy from occurring. Visit Dr Alex Polyakov east Melbourne fertility clinic providing a comprehensive range of fertility investigations and treatment.

What is Infertility Treatment? Types, Benefits, Risks and More

Some fertility problems are more easily treated but infertility treatment depends on various things:

- What causing the Infertility
- You and your partner's age
- How long you have been infertile

Infertility Causes

It is a myth that infertility is always a woman's problem. About one-third of infertility cases are due to problems with the man (male factors) and one-third are due to problems with the woman (female factors). Other cases are due to a combination of male and female factors or to unknown causes.

It is recommended that you seek medical advice if you are a woman aged below 35 years and fail to conceive after 12 months of contraceptive-free intercourse, or if you are aged 35 years and above, and fail to conceive after 6 months, to best improve your chances of conceiving.

Infertility in Men

Infertility in men is often caused by problems with making sperm or getting the sperm to reach the egg. Problems with sperm may exist from birth or develop later in life due to illness or injury. Some men produce no sperm, or produce too few sperm. Lifestyle can influence the number and quality of a man's sperm. Alcohol and drugs can temporarily reduce sperm quality. Environmental toxins, including pesticides and lead, may cause some cases of infertility in men. There are, however, effective male infertility treatments available.

Read here to know more about Male Infertility. Comprehensive overview covers causes, signs and symptoms, treatments, diagnosis and risk factors.

Infertility in women

Problems with ovulation account for most women's fertility problems. Without ovulation, eggs are not available to be fertilised. Signs of problems with ovulation include irregular menstrual periods or no periods. Simple lifestyle factors including stress, diet, or athletic training can affect a woman's hormonal balance. Much less often, a hormonal imbalance from a serious medical problem such as a pituitary gland tumour can cause ovulation problems.

Aging is an important factor in female infertility. The ability of a woman's ovaries to produce eggs declines with age, especially after age 35. About one-third of couples where the woman is over 35 will have

problems with fertility. By the time she reaches menopause, when her monthly periods stop for good, a woman can no longer produce eggs or become pregnant.

Other problems can also lead to complications with women's fertility. If the fallopian tubes are blocked at one or both ends, the egg can't travel through the tubes into the uterus. Blocked tubes may result from pelvic inflammatory disease, endometriosis, or surgery for an ectopic pregnancy.

Find out what kinds of tests women's need to get to find out why they may have some fertility concerns, causes, diagnosis and treatments for female infertility in detail.

How is infertility tested?

If you have been trying to have a baby without success, you may want to seek medical help. If you are over 35, or if you have reason to believe that there may be a fertility problem, you should not wait for one year before seeing a doctor. A medical evaluation may determine the reasons for a couple's infertility. Usually this process begins with physical exams and medical and sexual histories of both partners. If there is no obvious problem, like improperly timed intercourse or absence of ovulation, tests may be needed.

For a man, testing usually begins with his semen examination to look at the number, shape, and movement of his sperm. Sometimes other kinds of tests, such as hormone tests, are done.

For a woman, the first step in testing is to find out if she is ovulating each month. There are several ways to do this. For example, she can keep track of changes in her morning body temperature and in the texture of her cervical mucus.

Another tool is a home ovulation test kit, which can be bought at a pharmacy.

Checks of ovulation can also be done in the doctor's office, using blood tests for hormone levels or ultrasound tests of the ovaries. If the woman is ovulating, more tests will need to be done.

Some common female tests include:

- Hysterosalpingogram: An x-ray of the fallopian tubes and uterus after they are injected with dye shows if the tubes are open and shows the shape of the uterus.
- Laparoscopy: An exam of the tubes and other female organs for disease. An instrument called a laparoscope is used to see inside the abdomen.

Infertility Treatment for Women and Men

Depending on the test results, different treatments can be suggested. Eighty-five to 90 percent of infertility cases are treated with drugs or surgery.

Various fertility drugs may be used for women with ovulation problems. It is important to talk with Dr Alex Polyakov about the drug to be used. You should understand the drug's benefits and side effects. Depending on the type of fertility drug and the dosage of the drug used, multiple births (such as twins) can occur in some women.

If needed, surgery can be done to repair damage to a woman's ovaries, fallopian tubes, or uterus. Sometimes a man has an infertility problem that can be corrected by surgery.

Female Infertility

Fertility is the ability of a woman to achieve pregnancy. Infertility is usually defined as not being able to get pregnant despite trying for one year. A broader view of infertility includes not being able to carry a pregnancy to term and having a baby. Women under 35 years old who fail to conceive after 12-months of contraceptive-free intercourse are considered infertile.

What are the causes of female infertility?

About one-third of infertility cases are due to problems with the man (male factors) and one-third are due to problems with the woman (female factors). Some of the causes of female fertility may include:

- Problems with ovulation account for some women's fertility problems. Without ovulation, eggs are not available to be fertilised. Signs of problems with ovulation include irregular menstrual periods or no periods. Ovulation problems can be caused by:
- Simple lifestyle factors: Simple lifestyle factors including stress, diet, or athletic training can affect a woman's hormonal balance and ovulation. Much less often, a hormonal imbalance from a serious medical problem such as a pituitary gland tumor can also cause ovulation problems.
- Polycystic ovarian syndrome (PCOS): This is the most common cause of female infertility, where multiple cysts form in the ovaries.
- Hypothalamic dysfunction: Excess stress, being underweight or overweight, or a recent significant weight gain or loss disrupt the balance of the hormones that control the functions of the ovaries.
- Premature ovarian failure: The ovaries stop producing eggs very early, either because of an autoimmune disorder or following cancer treatment.
- Excess prolactin: When prolactin is produced in excess by the pituitary gland, the ovaries secretion of oestrogen hormone reduces.
- Pituitary gland tumour: A hormonal imbalance from a serious medical problem such as a tumour can cause ovulation problems.
- Aging is an important factor in female infertility. The ability of a woman's ovaries to produce eggs declines with age, especially after the age of 35. About one-third of couples where the woman is over 35 will have problems with fertility. By the time she reaches menopause, when her monthly periods stop for good, a woman can no longer produce eggs or become pregnant.
- Certain structural deformities in the female reproductive system can also lead to complications with fertility.
- If the fallopian tubes are blocked at one or both ends, the egg can't travel through the tubes into the uterus. Blocked tubes may result from pelvic inflammatory disease, endometriosis, or surgery for an ectopic (tubal) pregnancy.
- The cervical tissue may be preventing the sperm from entering the womb for fertilisation.
- Extra growths such as polyps and fibroids in the uterus can interfere with pregnancy.
- Endometriosis can interfere with implantation and its surgical removal can lead to the formation of scar tissue which can block the fallopian tubes.
- An abnormally shaped uterus will not support a healthy pregnancy.
- Sometimes the cause of infertility is unknown and may be governed by a combination of many minor factors.

Other problems can also lead to complications with women's fertility. If the fallopian tubes are blocked, the egg can't travel through the tubes into the uterus. Blocked tubes may result from pelvic inflammatory disease, endometriosis, or surgery.

Lifestyle factors may also affect female fertility. For example, smoking can damage the genetic material in eggs. A healthy weight can help with fertilization, whilst being both under- and overweight can contribute to infertility.

Signs and symptoms of Female Infertility

The primary sign of female infertility is the inability to conceive and sustain a pregnancy. Some of the symptoms of associated conditions that affect your menstrual cycle and ovulation may include:

- Very long (35 days or more) or very short (21 days or less) menstrual cycles
- Abnormal, irregular or no periods
- Painful periods
- Acne, male pattern hair growth on face and thinning of hair
- Weight gain
- Changes in sex drive and pain during sex
- White discharge from breasts

Who is at risk of female infertility?

You may be at a risk of female infertility if you have the following factors:

- Age: With age, the quality and quantity of the eggs produced by the ovaries declines. By mid-30, your body begins to produce fewer and poorer quality eggs.
- Smoking: Smoking increases your risk of ectopic pregnancy and miscarriage, damages your fallopian tubes and cervix, and ages your ovaries, reducing the number of eggs that it produces prematurely.
- Weight: A healthy weight is important for pregnancy. Being underweight or overweight affects normal ovulation.
- Sexual history: Practicing unprotected sex with multiple partners can increase your risk of contracting sexually transmitted infections, which can in turn damage the fallopian tubes and lead to fertility problems later.
- Alcohol: Excessive alcohol intake can also affect your fertility.

How is female infertility diagnosed?

When you visit the clinic for infertility problems, your doctor will review your medical and sexual histories, and perform a thorough physical examination.

The first step in female fertility testing is to find out if you are ovulating each month. There are several ways to do this. For example, you can keep track of changes in your morning body temperature and texture of your cervical mucus. Another tool is a home ovulation test kit, which can be bought at a pharmacy. Checks of ovulation can also be done in your doctor's office, using blood tests for hormone levels or ultrasound imaging of the ovaries. If you are ovulating, more tests will need to be done.

Some common female tests include:

- Hysterosalpingogram: This is an X-ray of the fallopian tubes and uterus after they are injected with a dye. It shows if the tubes are open and the shape of the uterus.
- Laparoscopy: An exam of the tubes and other female organs for disease. An instrument called a laparoscope is used to look inside the abdomen.
- Biopsy: A test done to remove a sample of the inner lining of the uterus for evaluation.
- Ovarian reserve testing: This is performed to determine the number and quality of eggs ready for ovulation.

What are the related disorders that occur with female infertility?

Female infertility can be associated with many other conditions such as PCOS, endometriosis, uterine polyps, pituitary tumours, premature ovarian failure, hyperprolactinemia and cervical stenosis.

What are the stages of female infertility?

There are 2 types of female infertility:

- Primary infertility: you are unable to become pregnant after a minimum of 1 year of having unprotected sex.
- Secondary infertility: you have been able to conceive at least once, but are now unable.

Female Infertility Treatment

What are the consequences of not treating female infertility?

Left untreated, you may not be able to get pregnant and have a baby.

What are the treatment options for female infertility?

Depending on the test results, different treatments can be suggested. Eighty-five to 90% of infertility cases are treated with drugs or surgery.

Various fertility drugs may be used for women with ovulation problems. It is important to talk with Dr Alex Polyakov about the drug to be used. You should understand the drug's benefits and side effects. Depending on the type of fertility drug and the dosage of the drug used, multiple births (such as twins) can occur in some women.

If needed, surgery can be done to repair damage to a woman's ovaries, fallopian tubes, or uterus.

Your doctor may even suggest assisted reproductive techniques (ART) to assist with a particular step in the reproductive process.

- Assisted reproductive technology (ART)
- In vitro fertilisation (IVF)
- Gamete intrafallopian transfer (GIFT)
- Zygote intrafallopian transfer (ZIFT)

What are the alternative treatments for female infertility?

Some of the alternative treatments for female infertility can include:

- Gestational surrogates: If your pregnancy poses high health risks or if you have a nonfunctional uterus, your pregnancy can be carried by another woman to term.
- Egg donation: ART procedures sometimes involve the use of donor eggs (eggs from another woman) or previously frozen embryos. Donor eggs may be used if you have impaired ovaries or a genetic disease that could be passed on to your baby.

When should I seek help for my infertility?

You may have reason to be concerned if you have been trying to get pregnant for at least one year and:

- You are in your late 30s and have been trying to get pregnant for six months or longer
- Your menstrual cycles are either irregular or absent
- You have painful periods
- You have a known history of fertility problems
- You have a history of pelvic inflammatory disease or endometriosis
- You have had multiple miscarriages
- You have been treated for cancer with drugs and radiation

How can female infertility be prevented?

Some forms of infertility cannot be prevented, but there are a few factors that may increase your chances of becoming pregnant:

- Avoid smoking, drugs and alcohol.
- Limit your intake of caffeine.
- Exercise regularly in moderation.
- Avoid being overweight or underweight.
- Practice safe sex and limit the number of sex partners.
- Consider ways of protecting your fertility from cancer treatment.

What is the current research regarding female infertility?

Extensive research is being done to find better treatment options for female infertility. Some of the recent studies are listed below:

- Vanni VS, Viganò P, Papaleo E, Mangili G, Candiani M, Giorgione V. Advances in improving fertility in women through stem cell-based clinical platforms. Expert Opin Biol Ther. 2017 May;17(5):585-593.

- Melin J, Madanat-Harjuoja L, Heinävaara S, Malila N, Gissler M, Tiitinen A. Fertility treatments among female cancer survivors giving birth in a Finnish register-based study. Acta Oncol. 2017 Mar 24;1-5.

FAQs

What is the percentage of the population affected by female infertility?

According to the World Health Organization (WHO), one in every four couples suffer from infertility.

How does female infertility affect you?

Pregnancy results from a chain of events. A woman's fertility often depends on her body's ability to release an egg from one of her ovaries (ovulation). The egg must travel through a fallopian tube toward her uterus (womb). A man's sperm must join with (fertilise) the egg along the way. The fertilised egg must then attach itself to the inside of the uterus. Female infertility can affect any of these processes and prevent you from conceiving and giving birth to a baby.

Which part of the body is affected?

The female reproductive system is made up of the following parts:

- Vagina: opening of the reproductive system, which allows the entry of sperm towards the uterus
- Cervix: narrow region that connects the vagina to the uterus
- Uterus or womb: where a fertilised egg implants and grows to develop into a baby
- Ovaries: organs on either side of the uterus, which release an egg each month to fertilise with sperm
- Fallopian tubes: narrow tubes that open out at the ovaries to pick up the released egg for fertilisation

These events are controlled by hormones secreted by the ovaries and the brain. Female infertility can affect the ability of these hormones or the reproductive system to function normally to allow and sustain a pregnancy.

Am I a candidate for IVF?

You may be a good candidate for IVF if you any of the below conditions:

- Ovulatory dysfunction
- Blocked, diseased or absent fallopian tubes
- Pelvic inflammatory disease
- Unexplained infertility
- Failed conventional fertility methods with injectable drugs and/or intrauterine insemination (IUI)
- Endometriosis
- PCOS
- Uterine factors or cervical mucus problems

If you have been trying to conceive, get honest & transparent fertility advice from Dr Alex Polyakov female infertility specialists in Melbourne. Visit Melbourne IVF clinic today or book an online appointment.

Male Infertility

Dr Alex Polyakov is a fertility specialist in Melbourne who has built a reputation as a doctor who combines his experience as a surgeon, obstetrician and gynaecologist with expertise in reproductive endocrinology. He specialises in women's fertility and also provides male infertility treatment.

What is male infertility/andrology?

Andrology is the medical speciality that focuses on male reproductive health and disorders, particularly male infertility and sexual dysfunction. Male infertility is a common reproductive problem affecting men. When couples are not able to conceive after having unprotected sex across at least one year, it is important

for both partners to be checked by their physician. One out of three infertility cases are linked to issues with the male partner.

What are the causes of male infertility?

Male infertility is a common reproductive problem affecting men. When couples are not able to conceive after having unprotected sex across at least one year, it is important for both partners to be checked by their physician. One out of three infertility cases are linked to issues with the male partner.

Some of the common causes of male infertility may include:

- Abnormal sperm size, shape, number and motility
- Enlarged veins in the scrotum (varicocele)
- Backward ejaculation of sperm (retrograde ejaculation)
- Undescended testicles
- Blockage of sperm-carrying ducts
- Hormonal imbalance
- Attack of sperm by the body's own defence system
- Chromosomal abnormalities
- Certain diseases and infections such as kidney disease, testicular cancer and sexually transmitted diseases (STD)
- Certain medications and prior surgeries
- Problems with sexual intercourse
- Excessive exposure to radiation, industrial chemicals and heavy metal
- Excessive use of illegal drugs, alcohol and tobacco smoking
- Stress and obesity
- Cancer treatment

Signs and symptoms of male infertility?

You may not show any symptoms of infertility until you try for a baby. When symptoms do show, they may include:

- Changes in hair growth
- Changes in sexual drive
- Small, firm testicles that may be painful, or have a lump or swelling
- Difficulty with erection and ejaculation

Who is at risk of male infertility?

You may be at a risk of male infertility if you have the following factors:

- Smoking, excessive alcohol intake and drug abuse
- Overweight
- Exposure to toxins
- Overheating or trauma to the testicles
- Previous major abdominal or pelvic surgery, or vasectomy (permanent birth control)
- Past or present infections
- History of undescended testicles
- Family history of fertility disorder
- Certain medical conditions, including tumour and sickle cell disease
- Certain medications
- Undergoing medical treatments for cancer

How is male infertility diagnosed?

To diagnose male infertility, your doctor will first conduct a general physical examination and medical history to understand your sexual habits, sexual development during puberty, chronic health problems,

medications and surgeries that could lead to infertility. Additional male fertility tests that may be ordered include:

- Semen analysis: This is a laboratory test carried out to assess the sperm count and quality from semen sample ejaculated into a sterile bottle.
- Transrectal ultrasound of the prostate: It is an investigation carried out to evaluate the prostate gland and detect any obstruction in the ducts that transport the sperm.
- Scrotal ultrasound: This is an imaging test to diagnose abnormalities of the scrotum or testicles.
- Testicular biopsy: A small piece of tissue is removed from the testicle using a sterile needle and evaluated under a microscope.
- Anti-sperm antibody tests: This test is performed to trace the antibodies that attack sperm.

What are the stages of male infertility?

There are 2 types of male infertility:

- Primary infertility: you are unable to support a pregnancy after a minimum of 1 year of having unprotected sex
- Secondary infertility: you have been able to support a conception at least once, but are now unable

What are the treatment options for male infertility?

Male infertility treatment depends upon the cause of infertility. Sometimes, a combination of treatment options will be suggested to overcome the underlying problem. These include:

- Surgery: indicated in cases of obstruction of the sperm duct, to improve the sperm motion and backward ejaculation of sperm
- Medications: drugs such as antibiotics prescribed to treat infections of the reproductive system
- Male hormone replacement therapy: may be used to treat hormonal imbalances

What are the alternative treatments for male infertility?

Some of the alternative treatments for male infertility may include:

- Counselling for sexual intercourse problems and relationships: This can help to boost fertility levels.
- Lifestyle modifications may be suggested: This includes changing habits such as illegal drugs, smoking and alcohol intake, and using stress reduction techniques.

How is male infertility surgery performed?

Some of the common surgeries performed to treat male factor infertility are:

Varicocelelectomy

Varicocelelectomy is surgery to treat a varicocele, which is the most common cause of infertility in men. The enlarged veins in the scrotum are ligated, sparing the neighbouring arteries and lymph vessels.

Vasovasostomy

This involves the reversal of a vasectomy surgery, where the vas deferens are cut, clamped or sealed. During vasovasostomy your surgeon reconstructs the severed vas deferens with stitches, allowing the easy passage of sperm.

Transurethral Resection of Ejaculatory Ducts

This procedure involves opening the ejaculatory ducts and allowing the normal flow of ejaculate.

Electroejaculation

An electroejaculator or electric probe is introduced into the rectum and placed against the prostate gland. High-frequency energy is used to stimulate ejaculation. The ejaculate is collected and used for IVF procedures.

Sperm retrieval techniques

Sperm can be retrieved from the testis or epididymis, by either inserting a needle through the skin or by making a small incision and aspirating it.

Assisted Reproductive Technology

ART is another option for male infertility treatment. This includes revolutionary treatment procedures that help couples with infertility problems to conceive. Some of them include:

intrauterine insemination (IUI), where sperm is placed into the female partners reproductive tract
 intracytoplasmic sperm injection (ICSI), where a healthy sperm is directly injected into the egg
 In vitro fertilisation (IVF), where fertilisation takes place outside the body in a lab.

IUI - Intrauterine Insemination

Intrauterine insemination (IUI) is a procedure by which washed ejaculated sperm are placed in the uterus at the time of your partner's ovulation. IUI is indicated in the following cases:

- Low sperm count
- Low motility
- Presence of antisperm antibodies
- Erectile dysfunction or inability to ejaculate

Intracytoplasmic sperm injection (ICSI)

Intracytoplasmic sperm injection is a technique where a mature sperm is injected directly into an egg that is isolated from your partner. ICSI is indicated in the below cases to treat :

- Few or dysfunctional sperm
- Presence of antisperm antibodies
- Ejaculated, surgically removed or cryopreserved sperm (from cancer patients)
- Repeated failure with IVF

How is ICSI performed?

A mature sperm and egg are recovered from you and your partner through the same procedure followed for IVF. The sperm tail is crushed to prevent motility. It is picked up by a micropipette and injected directly into the egg. This is then allowed to fertilise and the fertilised embryo is inserted into your partners womb for implantation.

The stages of recovery and care plan after sperm retrieval for IVF-ICSI?

All ART procedures require the recovery of sperm. If sperm are retrieved through surgery, you will be able leave the hospital in a short while. You may experience pain or mild discomfort for a few days, for which you will be prescribed pain medication. You are advised to wear a scrotal support (jock strap) for about 48 hours to protect your scrotum and testes and reduce discomfort. Stitches are usually dissolvable and do not require removing. You will be able to resume your normal activities in about 4 to 5 days after surgery.

How can male infertility be prevented?

Male infertility cannot be prevented, but there are certain strategies that can help maintain the quality and quantity of sperm:

- Avoid smoking, drugs and excessive alcohol intake.
- Avoid high temperatures such as hot tubs and steam baths.
- Avoid exposure to environmental and industrial toxins.
- Discuss with your doctor on the use of certain medications that may affect your fertility.
- Exercise regularly in moderation.
- Consider ways of protecting your fertility from cancer treatment.

What is the current research regarding male infertility?

Extensive research is being done to find better treatment options for male infertility. Some of the recent studies are listed below:

- Min KB, Min JY. Exposure to environmental noise and risk for male infertility: A 2population-based cohort study. Environ Pollut. 2017 Apr 12;226:118-124.
- Halder A, Kumar P, Jain M, Kalsi AK. Genomics: Tool to predict and prevent male infertility. Front Biosci (Schol Ed). 2017 Jun 1;9:448-508.
- Sinha A, Singh V, Yadav S. Multi-omics and male infertility: status, integration and future prospects. Front Biosci (Schol Ed). 2017 Jun 1;9:375-394.
- Mittal PK, Little B, Harri PA, et al. Role of Imaging in the Evaluation of Male Infertility. Radiographics. 2017 Apr 14:160125.

FAQs

What is the percentage of the population affected by male infertility?

Male infertility accounts for 20-30% of failed pregnancies and contributes to 50% of overall cases. Specifically, in Australia, the rate of male infertility is 9%.

How does male factor infertility affect you?

Male fertility is based on the production of healthy sperm and delivering them into a female partner's reproductive tract. This basic function may be impaired by many structural and functional factors.

Which part of the body is affected?

The male reproductive system consists of the following:

- Testicles: produce and store sperm
- Epididymis and vas deferens: ducts that transport sperm from the testicles
- Scrotum: sac of skin that contains the testes and epididymis outside the pelvic cavity in order to maintain the optimal temperature needed for sperm to survive
- Accessory glands: seminal vesicles and prostate gland lubricate and form a part of the semen, which is the liquid part of the ejaculate that contains sperm
- Urethra: carries sperm to the outside. It is also a part of the urinary system.
- Penis: muscular organ containing the urethra, and responsible for the ejaculation of sperm into a woman's uterus

Male fertility is dependent on the quantity and quality of sperm produced by the testis, and its transportation to the woman's uterus through the penis.

What are the consequences of not treating male infertility?

Left untreated, you may not be able to father a biological offspring.

What are the related disorders that occur with male infertility?

Male infertility can be associated with many other conditions such as varicocele, tumour, undescended testicles, cystic fibrosis, Klinefelter's syndrome, Kallmann's syndrome, hypospadias, celiac disease and Kartagener's syndrome.

Am I a candidate for male infertility surgery?

You may be a good candidate for male infertility surgery if you have:

- Obstructive or nonobstructive azoospermia: lack of motile sperm in semen
- Oligospermia: low sperm count
- Varicocele: enlarged scrotum veins
- Ejaculatory duct obstruction (EDO)
- Problems with ejaculation
- Want to reverse previous vasectomy

If you have been trying to conceive, get honest & transparent fertility advice from Dr Alex Polyakov male infertility specialists in Melbourne. Visit our fertility clinic or book an appointment.

IVF & Assisted Reproductive Technology (ART)

IVF

Assisted Reproductive Technology (ART) uses special methods to help infertile couples. ART involves handling both the woman's eggs and the man's sperm. Success rates vary and depend on many factors. ART can be expensive and time-consuming. But ART has made it possible for many couples to have children that otherwise could not have been conceived.

In vitro fertilisation (IVF) is a procedure made famous with the 1978 birth of Louise Brown, the world's first test-tube baby. IVF is often used when a woman's fallopian tubes are blocked or when a man has low sperm count. A drug is used to stimulate the ovaries to produce multiple eggs. Once mature, the eggs are removed and placed in a culture dish with the man's sperm for fertilisation. After about 40 hours, the eggs are examined to see if they have become fertilised by the sperm and are dividing into cells. These fertilised eggs (embryos) are then placed in the woman's uterus, thus bypassing the fallopian tubes.

OUR SERVICES FOR IVF TREATMENT

IUI/ ARTIFICIAL INSEMINATION TREATMENT

Artificial insemination treatment is a form of assisted reproductive technology (ART), which is performed to treat infertility and help achieve pregnancy.

IVF Treatment in East Melbourne

If you are struggling to become pregnant after a year of trying, you might be considering the risks and benefits of IVF. Dr Alex Polyakov is a skilled and experienced physician in Melbourne regarding the IVF process.

In vitro fertilisation (IVF) is a complex clinical procedure that helps to achieve conception by treating existing infertility or genetic problems. IVF is a time-consuming, expensive and an invasive procedure, which takes around 2 weeks for the completion of a single fertilisation cycle. The IVF process involves collecting matured eggs from the ovaries and combining them with the sperm in the laboratory. After fertilisation, the eggs are implanted into the woman's uterus.

The IVF process can be completed with eggs and sperm from the bodies of the couple trying to get pregnant, but eggs and sperm from donors, or eggs that have been frozen or preserved at a fertility clinic, can be used as well.

Indications for IVF

The most common indications for IVF include:

- Damaged or blocked fallopian tubes
- Ovulation problems
- Premature ovarian failure (loss of normal function of your ovaries before the age of 40)
- Severe endometriosis (presence of endometrial tissue outside the uterus)
- Presence of uterine fibroids (benign tumours in the wall of the uterus)
- Male factor infertility, including low sperm count and low sperm motility
- Presence of a genetic disorder
- To preserve fertility for patients with cancer or other health conditions
- Unexplained infertility

IVF Procedures

The steps involved in an IVF treatment are:

- **Ovulation induction:** The doctor will administer fertility drugs to boost the production of your eggs. Transvaginal ultrasounds will be conducted to monitor the development of the eggs and blood tests obtained to check hormone levels.
- **Egg retrieval:** Your doctor will perform a follicular aspiration, a minor surgical procedure to remove the eggs from your ovaries. An ultrasound probe is inserted through the vagina and into the follicles under ultrasound guidance. Each follicle in the ovary is pierced in order to retrieve the egg.
- **Insemination and fertilisation:** The eggs are mixed with the sperm in an environmentally controlled chamber to facilitate the process of insemination. The egg is fertilised a few hours after insemination. If the chance of fertilisation is low, intracytoplasmic sperm injection (ICSI) may be used where the sperm is directly injected into the egg.
- **Embryo culture:** Division of the fertilised egg forms an embryo. The development of the embryo is monitored and within 5 days, a normal embryo has several actively dividing cells.
- **Embryo transfer:** Embryo transfer is performed 3 to 5 days after egg retrieval and fertilisation. A thin tube containing one or more embryos is inserted into the vagina through the cervix and into the uterus. After transfer, if an embryo attaches or sticks to the womb lining, it results in pregnancy.

After the IVF procedure

As the embryo transfer is carried out under the guidance of ultrasound, you will have a full bladder during the procedure. You will be able to empty the bladder after the procedure. For the first two days after an embryo transfer you should refrain from heavy lifting, physical activity like running or aerobics, swimming, alcohol, smoking and intercourse. You can do a pregnancy test 10 days after embryo transfer to confirm pregnancy.

IVF Risks and Complications

As with any surgical procedure risks and complications can occur. The possible complications associated with specific steps of an IVF include:

- Risk of multiple births
- Risk of premature and low birth weight
- Ovarian hyperstimulation syndrome (OHSS) (a condition of ovarian enlargement accompanied by fluid accumulation in the abdominal cavity)
- Miscarriage
- Risks of egg retrieval include bleeding, infection, and damage to the bowel, bladder, or blood vessels
- Possibility of ectopic or tubal pregnancy

If you feel that IVF is right for you and your family, please don't hesitate to contact Dr Alex Polyakov in Melbourne to schedule an appointment and discuss your options.

What are the advantages and disadvantages of IVF?

The primary advantage of IVF is the achievement of a successful pregnancy and healthy birth. It allows couples who are otherwise unable to get pregnant, to have a baby.

Other advantages include:

- It is more successful than other assisted reproductive technology methods and these success rates have been increasing since its conception.
- It can help identify fertilisation problems in those with unexplained infertility.
- It can help screen for inherited diseases.

The disadvantages of IVF include:

- You may have to undergo many cycles before you can have a healthy live birth.
- It is associated with side effects such as ovarian hyper-stimulation syndrome (OHSS), multiple pregnancies and ectopic pregnancy.
- IVF can cause a lot of stress and affect your emotional and psychological wellbeing.

- It can be expensive.

What are the outcomes of IVF?

IVF success is not only restricted to the attainment of pregnancy, but also the birth of a healthy child without any related complications. According to the Centers for Disease Control and Prevention (CDC), IVF results in an average of 29.4% pregnancy and 22.4% live births.

What are the potential complications of IVF?

As with most therapeutic procedures, IVF may be associated with certain risks and complications such as:

- Multiple births
- Premature and low birth weight baby
- Ovarian hyperstimulation syndrome (OHSS): a condition of ovarian enlargement accompanied by fluid accumulation in the abdominal cavity
- Miscarriage
- Bleeding
- Infection
- Damage to testes
- Possibility of ectopic or tubal pregnancy
- Complications associated with surgery such as pain, tenderness, cloudy discharge, haematoma (swelling)
- Birth defects and chromosomal abnormalities

FAQs

What is the downtime of IVF treatment?

IVF is performed in cycles, with each cycle lasting about 6-9 weeks. You are suggested about 3 months for you and your partner to physically and emotionally recover from a failed pregnancy before you start with the next cycle. Some would require 3 such cycles for a positive pregnancy. However, you will be able to continue with your normal activities after the procedure, with caution against vigorous activities.

What is the cost of IVF treatment?

Any costs involved will be discussed with you prior to your surgery at our IVF clinic Melbourne.

Am I a candidate for IVF treatment?

You are a candidate for IVF if you have the following:

- Low count of motile sperm (<5 million sperm)
- Poor sperm structure
- Failed IUI
- Presence of antisperm antibodies

How do I prepare for IVF treatment?

IVF involves a series of steps that are performed in accordance with your partner's monthly menstrual cycle. It can be a long and laborious process for some, so it is best for you and your partner to be physically and mentally prepared for each stage of treatment as well as its outcomes.

IVF Specialists in Melbourne

Dr Alex Polyakov fertility and IVF specialists who are committed to providing you with the best possible solutions of achieving a pregnancy. Visit Dr Alex Polyakov East Melbourne IVF clinic providing personalised care for all. Call today on 03 9998 6093 or enquire here.

Artificial and Intrauterine Insemination

Artificial insemination treatment is a form of assisted reproductive technology (ART), which is performed to treat infertility and help achieve pregnancy. It involves the introduction of sperm into a woman's reproductive tract for fertilisation and achieving a potential pregnancy. The most common method is called

intrauterine insemination (IUI), which involves the insertion of the sperm directly into the uterus. The aim of IUI is to allow the maximum number of healthy sperm to reach the fallopian tubes and increase the chances of fertilisation.

Condition

What is the normal reproductive process?

The normal process of reproduction involves a chain of events. The woman releases an egg from one of her ovaries (ovulation). The egg travels through a fallopian tube toward her uterus (womb). A man's sperm is introduced into the vagina through intercourse. It travels up the uterus and into the fallopian tube to join with (fertilise) the egg. The fertilised egg then attaches to the inside of the uterus, initiating pregnancy.

What is the anatomy of a normal reproductive system?

The female reproductive system is made up of the following parts:

- Vagina: opening of the reproductive system, which allows the entry of sperm towards the uterus
- Cervix: narrow region that connects the vagina to the uterus
- Uterus or womb: where a fertilised egg implants and grows to develop into a baby
- Ovaries: organs on either side of the uterus, which release an egg each month to fertilise with a sperm
- Fallopian tubes: narrow tubes that open out at the ovaries to pick up the released egg for fertilisation

The male reproductive system consists of the following:

- Testicles: produce and store sperm
- Epididymis and vas deferens: ducts that transport sperm from the testicles
- Scrotum: sac of skin that contains the testes and epididymis outside the pelvic cavity in order to maintain the optimal temperature needed for sperm to survive
- Accessory glands: seminal vesicles and prostate gland lubricate and form a part of the semen, which is the liquid part of the ejaculate that contains sperm
- Urethra: carries sperm to the outside and is also a part of the urinary system
- Penis: muscular organ containing the urethra, and responsible for the ejaculation of sperm into a woman's uterus

What is infertility?

Infertility is a condition characterised by the inability to achieve pregnancy and a healthy live birth. It occurs when one or more of the processes of a normal reproductive cycle fail to occur.

How does infertility affect you?

Male and female infertility affects the respective reproductive processes and ultimately, the ability to conceive and give birth to a baby.

Treatment

What are the consequences of not treating infertility?

Left untreated, you may not be able to have biological offspring.

Am I a candidate for artificial insemination?

Artificial insemination is considered for the following cases:

- Unexplained infertility
- Retrograde ejaculation (backward release of sperm into the urinary bladder)
- Absent, low quality or poor quality sperm
- Hostile cervical environment for sperm
- Cervical scar tissue
- Single women and same-sex couples using donor sperm

- Endometriosis
- Semen allergy

How do I prepare for artificial insemination?

The process of artificial insemination is performed in coordination with the menstrual cycle. Timing is crucial to the outcome. You will be monitored for signs of ovulation; either at home with an ovulation predictor kit that measures the urine for specific hormones, or in the clinic through transvaginal ultrasound. Your doctor may also administer human chorionic gonadotropin hormone (HCG) to initiate the release of one or more eggs at the right time.

At the same time, the semen sample from your partner or frozen donor sperm is thawed and prepared. The sperm is washed within 1 hour of ejaculation, and concentrated by selecting the highly active and healthy sperm. You are advised to avoid intercourse 2 to 5 days before the procedure to ensure a high sperm count.

The artificial insemination is performed the day after or after two days of ovulation.

How is artificial insemination performed?

Artificial insemination is usually performed in the clinic and takes about 15 to 20 minutes. You will lie on your back with your legs supported in stirrups. A speculum is inserted into your vagina. A vial containing the healthy sperm is attached to a catheter (thin, long tube). This catheter is inserted into your vagina, cervix or uterus (intrauterine insemination) to place the sperm. You will not experience pain. The catheter and speculum are then removed.

What can I expect after artificial insemination?

After artificial insemination, you are asked to lie on your back for some time, after which you can go about your normal activities, but avoid strenuous activities. You may experience cramping and/or spotting.

You are advised to wait for two weeks and then take a home pregnancy test and confirm with a blood test for pregnancy. If your test results show negative, the artificial insemination process is repeated. You may have to undergo 3 to 6 cycles of treatment.

What are the advantages of artificial insemination?

The advantages of artificial insemination are:

- Increased number of sperm reaching the fallopian tube
- Only healthy sperm are introduced for fertilisation
- Less invasive
- Useful for single women and same-sex couples who choose to have a biological baby
- Takes few minutes and is relatively painless

What are the outcomes of artificial insemination?

The success of artificial insemination depends on many factors such as maternal age, and egg and sperm quality. It will not help if your fallopian tubes are blocked.

What are the potential complications of artificial insemination?

As with all procedures, artificial insemination may be associated with certain complications such as infection, multiple pregnancies, ectopic pregnancy and spontaneous abortion.

What is the downtime of artificial insemination?

You will be able to resume your normal activities after the procedure.

What is the cost of artificial insemination in Melbourne and Australia?

Any costs involved will be discussed with you prior to your surgery.

What is the current research regarding artificial insemination?

Extensive research is being done to find better treatment outcomes for artificial insemination. Some of the recent studies are listed below:

- Thijssen A, Creemers A, Van der Elst W, et al. Predictive factors influencing pregnancy rates after intrauterine insemination with frozen donor semen: a prospective cohort study. Reprod Biomed Online. 2017 Mar 23. pii: S1472-6483(17)30144-X.
- Scholten I, van Zijl M, Custers IM, et al. The effectiveness of intrauterine insemination: A matched cohort study. Eur J Obstet Gynecol Reprod Biol. 2017 May;212:91-95.

Ovulation Induction

Ovulation induction is an artificial reproductive technique (ART) that uses hormonal therapy to initiate the development and release of an egg for fertilisation. It is often used to stimulate the maturation of multiple eggs in a single menstrual cycle, thereby increasing the chances of fertilisation.

Condition

What is ovulation?

Every woman is born with a lifetime's supply of egg cells in her ovaries. Each egg cell is contained in a small sac called a follicle. Follicle stimulating hormone (FSH) and luteinising hormones (LH) are two hormones produced by the brain to stimulate and regulate the monthly release of an egg. At the onset of puberty, one egg from an ovary is released every month until menopause (cessation of periods). Each egg released is picked up by the adjacent fallopian tube. The egg can be fertilised by a sperm and lead to pregnancy or, in the absence of sperm, it will dissolve and be flushed out with the menstrual flow. Each stage of ovulation is governed by many hormones secreted by the hypothalamus, pituitary gland, adrenal gland, thyroid gland and ovaries.

This process of ovulation and its timing within the menstrual cycle plays a key role in determining fertility and achieving pregnancy. A normal menstrual cycle is between 28-32 days, measured from the first day of period to the first day of the next menstrual flow. Some cycles may be shorter or longer. Ovulation usually occurs on the 11th to 21st day, starting from the first day of the last menstrual period (LMP). This is considered a fertile period when couples wishing to conceive can have intercourse and increase their chances of pregnancy.

What are the different ovulation disorders?

Many conditions that affect ovulation can lead to infertility. These may include:

- Polycystic ovarian syndrome (PCOS): formation of multiple cysts where the egg does not develop or does not get released as it should; It is the most common cause of infertility.
- Hypothalamic dysfunction: disruption in the release of hormones by the hypothalamus
- Premature ovarian insufficiency: egg production ceases prematurely at an early age, much before menopause

What is the percentage of the population affected by ovulation disorders?

Being the most common ovulation disorder that causes infertility, PCOS affects 5-10% women of childbearing age.

How does ovulation disorder affect you?

Ovulation disorders disrupt or prevent the ovulation process and can thereby lead to infertility. It is a cause of infertility when associated with irregular or no periods (amenorrhea). It is rarely a cause of infertility when associated with regular menstrual periods without premenstrual symptoms, such as mood swings, breast tenderness or lower abdominal swelling.

Which part of the body is affected?

Eggs are contained in two small oval-shaped ovaries present on either side of the womb in the pelvic region. At the time of ovulation, one mature egg is released from the ovary and picked up by finger-like structures at the ends of the fallopian tube. The tube then transports the egg to the womb.

What are the causes of ovulation disorder?

Ovulation disorders occur when one part of the ovulation process malfunctions. This can happen when:

- The hypothalamus stops secreting gonadotropin-releasing hormone, which signals the pituitary gland to release LH and FSH, the two hormones that trigger ovulation.
- The pituitary gland produces low levels of LH and FSH.
- The pituitary gland produces high levels of prolactin, which results in low levels of hormones that stimulate ovulation. This may be caused because of a pituitary gland tumour.
- The ovaries release low levels of oestrogen hormone.
- The adrenal glands release high levels of male hormones (such as testosterone).
- The thyroid glands release very high or very low levels of thyroid hormones, which regulates the pituitary gland and ovaries.

Ovulation problems may occur as a result of a disorder such as

- Polycystic ovary syndrome (PCOS)
- Diabetes
- Early menopause

Who is at risk of ovulation disorder?

You may be at a risk for ovulation problems if you have the following:

- Obese
- Psychological stress
- Are on certain drugs (such as estrogens, progestins and antidepressants)
- Excessive exercise
- Weight loss

What are the signs and symptoms of ovulation disorder?

The signs and symptoms of ovulation problems depend on the related disorder and may include:

- Absent or irregular periods
- Unusual spotting, light or heavy periods
- Pain during periods and intercourse
- Lack of premenstrual symptoms such as bloating or breast tenderness
- Pelvic pain
- Acne, excessive growth of facial hair
- Obesity

What are the related disorders that occur with ovulation induction?

Ovulation induction is associated with PCOS, diabetes and infertility.

How is ovulation disorder diagnosed?

When you visit your doctor with problems in your menstrual cycle or inability to attain a pregnancy despite trying without contraception for a year, your doctor will review your menstrual history and perform a thorough physical examination. You may be asked to record your daily body temperature as an increase in your body temperature indicates ovulation. This can also be performed using a home ovulation predictor kit. Other tests may include ultrasound or blood tests.

Treatment

What are the consequences of not treating ovulation disorder?

Left untreated, you may not be able to have biological offspring.

What are the treatment options for ovulation problems?

Ovulation problems can be treated with lifestyle changes such as diet and maintaining a healthy weight. Other treatments may include:

- Fertility drugs
- In vitro fertilisation
- Surgery to open blocked fallopian tubes and remove endometrial tissue

What are the conditions considered for ovulation induction?

You will be considered for ovulation induction if you suffer from:

- Anovulation: absence of ovulation (ovaries do not release an egg)
- Oligo-ovulation: irregular ovulation
- PCOS
- Luteal phase deficiency (LPD): insufficient production of progesterone
- Unexplained infertility
- During IVF, to trigger ovulation for the treatment of male factor infertility
- During IVF, to increase the number of eggs released

What are the prerequisites for ovulation induction?

The required prerequisites for ovulation induction are:

- Healthy fallopian tubes that are open and not blocked.
- Absence of moderate/severe endometriosis, especially involving the tubes and/or the ovaries, and pelvic inflammatory disease
- Fertile sperm test
- Adequate ovarian reserve

How do I prepare for ovulation induction?

Before ovulation induction, your doctor will suggest:

- Semen analysis to test for sperm count and number and presence of sperm antibody to exclude male infertility
- Hysterosalpingogram (HSG) or laparoscopy, to test the viability of fallopian tubes

How is ovulation induction performed?

Ovulation induction involves the following steps:

- Ovulation stimulation: This involves the administration of certain drugs to initiate the release of egg(s) from your ovary. The following are commonly used drugs for ovulation induction:
 - Clomiphene citrate: oral medication that is administered on the 3rd to 5th day after the onset of your periods. This drug works by blocking oestrogen receptors, making your body believe that the levels of oestrogen are low. The body thus initiates the production FSH and induces ovulation. This method of treatment requires monitoring.
 - Human menopausal gonadotropin (hMG): injectable medication that includes FSH and LH that is administered early in the menstrual cycle and continued for 8 to 14 days until the maturation of one or more follicles.
 - Follicle stimulating hormone (FSH): daily injectable medication administered for 5 to 12 days until the maturation of one or more follicles.
 - Synthetic gonadotropin releasing hormone (FSH/LH inhibitor): causes an initial surge of LH and FSH followed by the suppression of these hormones. It is used in preparation for ovulation induction cycles as it improves hormonal control, enhances egg production and prevents spontaneous ovulation.
- Cycle monitoring: Throughout your treatment, your doctor will monitor how you respond to treatment through blood tests. This helps your doctor change the treatment if needed. Vaginal ultrasound may be ordered to check the number and size of the follicles. You will not be restricted from intercourse during this period.
- Ovulation: Once the follicles mature, your doctor will inject human chorionic gonadotropin (hCG) to trigger the release of the egg from the follicle, which happens within 36 hours. Two things can happen during this time:
 - You will be advised on the appropriate time to have intercourse.

- Your doctor will perform an intrauterine insemination as part of the IVF procedure, where sperm will be directly inserted into your uterus for fertilisation.
- Luteal phase: Approximately 10 days after your hCG injection, you are required to confirm ovulation through a blood test. If your menstrual flow does not start, you are required to perform a pregnancy test after 16 days of your injection.

What can I expect after ovulation induction?

After confirming positive for pregnancy, your doctor will continue to monitor the progress of your pregnancy with weekly hCG tests for about 8 weeks of pregnancy. Then, an ultrasound is performed to determine the presence of a pregnancy sac with a foetus and the presence of a foetal heartbeat.

What are the advantages of ovulation induction?

The advantages of ovulation induction are:

- Ovulation induction therapy stimulates the development and release of an egg for fertilisation in women who have problems with ovulation.
- When performed as part of an IVF cycle, ovulation induction helps mature multiple eggs in a single cycle, thereby increasing the chances of pregnancy.
- It also enhances the quality and quantity of the ovulation.

What are the outcomes of ovulation induction?

Ovulation induction helps release a healthy egg for fertilisation or multiple eggs for IVF treatment.

What are the potential complications of ovulation induction?

Some of the potential risks of ovulation induction are

- Multiple gestation
- Ovarian hyperstimulation
- Increased time commitment

What is the downtime of ovulation induction?

Ovulation induction starts on the third day of your menstrual cycle for about 7 to 10 days. This may continue for a few cycles until you achieve pregnancy. However, this does not require you to be off work. You can go about your normal routine.

What is the cost of ovulation induction?

Any costs involved will be discussed with you prior to your surgery.

How can ovulation disorders be prevented?

Not all forms of ovulation disorders can be prevented. However, maintaining a normal weight can lower your risk of ovulation disorders.

What are the lifestyle recommendations to manage ovulation disorder?

Eating healthy and engaging in moderate exercise are recommended for managing ovulation disorders.

What is the current research regarding ovulation induction?

Extensive research is being done to find better treatment outcomes of ovulation induction. Some of the recent studies are listed below:

- Horowitz E, Levran D, Weissman A. Extension of the clomiphene citrate stair-step protocol to gonadotropin treatment in women with clomiphene resistant polycystic ovarian syndrome. *Gynecol Endocrinol*. 2017 Apr 28:1-4.
- Haller L, Severac F, Rongieres C, et al. Intra-uterine insemination at either 24 or 48hours after ovulation induction: Pregnancy and birth rates. [French] *Gynecol Obstet Fertil Senol*. 2017 Apr;45(4):210-214.

Fertility Preservation

Freezing your eggs is a form of fertility preservation that conserves your eggs now so you can start a family in the future. Egg freezing is an increasingly popular option among women and can be considered for many different personal reasons. Some women are undergoing cancer treatment and want to protect their fertile eggs while others simply aren't ready to start a family during their peak fertile years.

The Perfect Timing for Egg Freezing

While egg freezing is a viable option for women who can't get pregnant immediately, the process is by no means guaranteed. The timing behind when you freeze and thaw your eggs will have a significant impact on your overall success.

How Egg Freezing Works

The egg freezing process starts with a period of hormonal stimulation in order to produce a series of mature eggs. This process will be overseen by your fertility specialist, ensuring the best possible methods and outcomes for you. It usually involves hormonal injections that you can do yourself at home.

After the stimulation process is complete, you will be sedated and the eggs will be removed from your ovaries using a fine needle and an ultrasound. This is a fast and simple procedure and you will be able to rest at home after it is completed.

The specialist freezing process that preserves your eggs is called vitrification and it allows them to be stored safely and in excellent condition.

Egg Freezing Think about It When You Wouldn't Think about It

One of the greatest difficulties that women experience with egg freezing is timing. Many of us wouldn't think about the procedure in our 20s or even our 30s when our limited supply of eggs is at their healthiest.

Many women think about egg freezing later in life, past the age of 35, when many of their eggs can no longer lead to a healthy pregnancy.

Approximately half of the eggs you choose to freeze may develop into an embryo, which then has less than a 50 percent chance of leading to pregnancy. Due to this, it's recommended that women freeze their eggs at a younger age when more healthy eggs can be produced, leading to a greater chance of pregnancy in the future.

Freezing Your Eggs between in Your 20s-Early 30s

While there is a chance you won't need these eggs, choosing to freeze them in your 20s-30s means: fewer cycles are required lower costs a greater number of higher quality eggs

Freezing Your Eggs from 35-40+

This may be the time you need them most, but freezing your eggs at a later age will mean:

- more cycles are required
- more costs to the patient
- reduced egg quality, egg numbers and live births

As well as this, pregnancy in older mothers always comes with extra complications, whether you're using frozen eggs or not. Risks including gestational diabetes, high blood pressure and losing the pregnancy. All are more prevalent in older pregnant women.

Weighing Up Your Options

If you're considering freezing your eggs, a consultation with a fertility specialist is a fantastic place to start. Based in East Melbourne, Dr Alex Polyakov can help you understand the risks and benefits involved in egg freezing and determine if it's right for you. Through assessments such as Ovarian Reserve Testing, Dr Alex can determine the number and quality of eggs that are ready for ovulation, giving you a greater insight into your egg freezing options.

To organise an appointment to discuss egg freezing, call 03 9998 6085 or contact Dr Alex online.

Obstetrics

Pregnancy planning

Planning your pregnancy alongside your GP and health professionals is essential and Dr Alex offers a range of resources to get you started. If you have been trying to fall pregnant for 12 months or more, Dr Alex can offer fertility investigations for men and women.

It is recommended that you see your local GP to optimise your chances of a healthy outcome prior to getting pregnant.

Normal pregnancy care

As an obstetric specialist, Dr Alex's care covers every major phase of your pregnancy.

An Experienced Obstetrician for Each Trimester of Pregnancy

First trimester care includes:

- ongoing checks of both your health and your baby's health
- support and answers to any questions or concerns you have
- lifestyle advice, essential nutrition and exercise

Second trimester care includes:

ongoing checks of the baby's development and changes in your health

- ultrasounds, screening tests and sex determination
- ongoing tests to check for complications and tailor your care plan, which will continue for the remainder of your pregnancy

Third trimester care includes:

- more detailed information about labour and delivery
- discussions about surgical delivery, vaginal birth and medication considerations
- initial information about life after pregnancy

Labour Options and Assistance

As your obstetrician, Dr Alex Polyakov is here for you from conception to delivery. In the lead up to labour, Dr Alex can help you understand the signs of labour as well as recommend childbirth preparation classes if desired.

We will discuss and put your preferences for the delivery into action: vaginal birth, elective Caesarean Section, pain relief options (if any) and the use of extra equipment.

High risk obstetrics

High-Risk Obstetric Specialist

Dr Alex also specialises in high-risk cases, such as pregnancies that involve:

- existing health conditions
- patients who are overweight or obese
- multiple births
- patients with a young or old maternal age (teenagers and those 35+)

In these cases, high-risk facilities and complete expertise in women's reproductive health is invaluable. With experience in endocrinology, fertility and microsurgery, Dr Alex ensures that every possible consideration is carefully planned for in order to understand, overcome and whenever possible, avoid complications.

OUR SERVICES FOR HIGH RISK OBSTETRICIAN MELBOURNE

GESTATIONAL DIABETES

Pregnant women who have never had diabetes before but who have high blood sugar (glucose) levels during pregnancy are said to have gestational diabetes.

PRE-ECLAMPSIA

Pre-eclampsia is a serious disorder of pregnancy characterised by high maternal blood pressure, protein in the urine and severe fluid retention.

Gestational Diabetes

Pregnant women who have never had diabetes before but who have high blood sugar (glucose) levels during pregnancy are said to have gestational diabetes. Gestational diabetes is a form of diabetes that some women develop during the 24th - 28th week of their pregnancy. It usually disappears after the birth, and does not mean that the baby will be born with diabetes.

Diabetes Mellitus is a condition when the pancreas (the organ responsible for producing insulin) is either unable to make insulin, or the insulin is unable to work effectively. The function of insulin is to keep the glucose levels within normal limits. With inadequate insulin, glucose builds up in the blood leading to high blood glucose levels, causing health problems.

Causes

The definite cause of gestational diabetes is not known, but it is assumed that as pregnancy progresses, the mother's energy needs increase. Also, placental hormones that help the baby grow and develop, block the action of the mother's insulin. This is called insulin resistance. The pregnant woman needs extra insulin so the glucose can move from the blood into the cells where it is used for energy. If the body is unable to meet this requirement, diabetes develops. When the pregnancy is over and the insulin needs return to normal, the diabetes usually disappears.

Women who develop gestational diabetes have a greater risk of developing type II diabetes later on.

Tell Dr. Alex Polyakov

- If you have had gestational diabetes during a previous pregnancy
- If you have a family history of gestational diabetes or diabetes

- If you have given birth to a baby weighing four kilos or over.

Course of Illness

Although gestational diabetes usually goes away after birth (when hormone levels return to normal), it still needs to be taken seriously.

- The main concern is that it can increase the baby's weight, and have other health effects on the unborn baby.
- If the baby becomes very large (four kilos or more) it may be necessary for the woman to have a caesarean delivery, or for the doctor to induce the birth a little earlier, before the baby grows too big. But this can usually be avoided.
- Women who develop gestational diabetes have about a 50% risk of developing type II diabetes later on.
- Type II diabetes, which is increasingly common in people over the age of 40, is a chronic disease, which has to be carefully managed with healthy eating and regular physical activity. Sometimes long-term medication is also needed. If type II diabetes isn't controlled it can cause serious health problems including heart and kidney disease, and eye problems.
- In severe cases, the baby may die in the uterus.

When gestational diabetes is well controlled, these risks are greatly reduced.

Routine Tests

Pregnant women are routinely checked for gestational diabetes between the 24th and 28th weeks of their pregnancy. Women at increased risk are usually tested earlier. The glucose challenge test involves taking a glucose drink, waiting for one hour and then having a blood test. If your glucose levels seem high, you will have a glucose tolerance test to confirm the diagnosis. This involves fasting from the night before the test, drinking a stronger glucose solution, and taking a blood test two hours later.

Managing Gestational Diabetes

A woman with gestational diabetes needs careful monitoring for the remainder of her pregnancy.

Management is mainly aimed at changing to a healthy eating plan, physical activity and monitoring blood glucose levels. Specific management strategies include:

- Eating Regular Meals - Hospital dietitians can advise on which foods to eat and which foods to avoid, and how often to eat
- Regular exercise to help reduce insulin resistance
- Dietary modifications, such as switching to a low fat, high fibre diet with plenty of fresh foods
- No alcohol or cigarettes
- Regular blood tests performed at home to check glucose levels
- Some women may need to take medications, these may include tablets or insulin injections

Symptoms

Diabetes often has no symptoms, which is why all pregnant women are routinely tested.

If symptoms occur, they may include

- Unusual Thirst
- Excessive Hunger
- Excessive Urination
- Frequent Infections
- High Blood Pressure

Risk Factors

Any pregnant woman can develop gestational diabetes, but risk factors that increase susceptibility include:

- Being overweight
- A family history of diabetes
- Women with hypertension (high blood pressure)
- Being over the age of 30 years (everyones tendency to develop diabetes increases with age)
- Previous babies were large at birth (4kg and over)

Pre-Eclampsia

Pre-eclampsia is a serious disorder of pregnancy characterised by high maternal blood pressure, protein in the urine and severe fluid retention.

Pregnancy and Blood Pressure

Pregnancy and Blood Pressure Routine: blood pressure and urine protein check up during antenatal care is conducted for the early detection of a condition known as pre-eclampsia, also known as pre-eclamptic toxaemia, or just toxaemia.

Pre-eclampsia is a serious disorder of pregnancy characterised by high maternal blood pressure, protein in the urine and severe fluid retention. It is a fairly common pregnancy complication, and one to two per cent of cases are severe enough to harm the lives of both the mother and the unborn child.

There is no cure for the condition, except delivery of the baby.

Complications for Foetus

The placenta in the uterus is a special organ that allows oxygen and nutrients to pass from the mother's bloodstream to the baby, and waste products (such as carbon dioxide) to pass from the baby's bloodstream to the mother. In pre-eclampsia, blood flow to the placenta is obstructed. In severe cases, the baby can be gradually starved of oxygen and nutrients, which may affect it's growth. All these lead to:

- Neonatal asphyxia (low oxygen)
- Neonatal hypoglycemia (low glucose)
- Intrauterine growth restriction (low birth weight)

This growth restriction threatens the life of the baby and it may be necessary to deliver the baby prematurely. Another serious complication of pre-eclampsia is abruption, which means the placenta separates from the uterine wall and the woman experiences vaginal bleeding and abdominal pain. This is a medical emergency.

Management

Since pre-eclampsia can be asymptomatic, a regular antenatal check up is advised. Bed rest, in the early stages, may help control the situation. Sometimes medication is needed to control blood pressure. But if the signs of toxaemia and poor foetal growth persist, it will often be necessary to induce labour and have the baby born a week or two early.

Risk Factors

- First pregnancy or a new partner
- Family history

- Diabetes mellitus
- Multiple pregnancy
- Obesity
- Extremes of maternal age
- Preexisting hypertension
- Hydatidiform mole (A relatively rare mass or tumour that can form within the uterus at the beginning of a pregnancy)
- Hydrops fetalis (fluid accumulation in the foetus)

The mother's blood pressure usually returns to normal as soon as the baby is delivered.

Signs & Symptoms

Pre-eclampsia can be asymptomatic, and may develop at any time after 20 weeks of pregnancy but commonly develops during the later stages of pregnancy.

Pre-eclampsia most commonly causes high blood pressure and protein in the urine. Some advanced symptoms include

- Hand and face swelling
- Headache
- Visual disturbance
- Upper abdominal pain
- Dizziness
- Nausea and vomiting

Labour

Dr. Alex Polyakov respects a woman's right to choose the method of her delivery. If you wish to aim for a vaginal birth then he will support you fully in this choice. Similarly, if you choose to have an elective Caesarean Section, he will support you fully in this choice as well.

It is important to recognise the signs of labour so that you will know when you are experiencing the "real thing." If this is your first baby, you will most likely experience the descent of the baby's head into your pelvis sooner than women who have already had children. Typically, the signs of labour include uterine contractions, tightening of your stomach, and cramps in your low back. About two thirds of women experience these before their water breaks. About one third will notice fluid leaking out first.

You may also be interested in taking a childbirth preparation class, which teach methods for coping with labour and delivery, and helps guide new parents in the many decisions they will make before and during the birth process. One of the things you may be most concerned with is the amount of pain you may experience during labour. You can have a very "low-tech" birth if you wish, knowing that all the best equipment, services and staff are immediately available, if required. Childbirth is different for all women, and no one can predict how much pain you will have. During the labour process, your midwife or Dr. Alex Polyakov will ask you if you need pain relief, and will help you decide what option is the best for you. Your options may include a local or intravenous analgesic (pain relieving drug), an epidural (injection which blocks pain in the lower part of your body), spinal anaesthesia (used when the delivery will require forceps), or a pudendal block (numbs the vulva, vagina and anus during the second stage of labour and during delivery).

Labour Options and Assistance

As your obstetrician, Dr Alex Polyakov is here for you from conception to delivery. In the lead up to labour, Dr Alex can help you understand the signs of labour as well as recommend childbirth preparation classes if desired.

We will discuss and put your preferences for the delivery into action – vaginal birth, elective Caesarean Section, pain relief options (if any) and the use of extra equipment.

Post Natal care

Your baby is finally here! The joys and challenges of motherhood are about to begin.

Post Natal Care

It is important to remember to take care of yourself as well as your new baby. Caring for a new baby can be fun but it is also hard work. How much and how often you should feed the baby? What do you do when the baby is crying, or sick? How do you prevent accidents? These questions can be overwhelming at first, but you will quickly adjust. A new baby needs constant care, but you will be skilled at taking care of your child in no time. There are people out there, including your family, friends, doctor, and support groups, who will help you get through it. You are not alone.

You have experienced nine months of changes in your body. Those changes will continue in the next couple of months as you decide whether or not to breastfeed, and as your body starts to recover from having the baby. It is important to take care of yourself during this time. Make sure to rest when you can and don't try to do too much.

The effect of pregnancy and labour on a woman's body can be tremendous. If you are trying to lose some additional pregnancy weight, make sure you do it in a healthy way and consult your GP before you start any type of diet or exercise plan. Don't diet while breastfeeding. You'll need to consume an additional 500 calories per day.

In addition to the physical changes to your body, you may feel depressed. This can be a very normal phase following childbirth. Fifty to 75% of new mothers feel a little sad or depressed after giving birth. These feelings can range from very mild to serious, but there is help. Be aware of your feelings and continue to talk with your family, friends, and your doctor. Sometimes, this depression will go away on its own, but medication or therapy may be needed. Both can help you feel better and get back to enjoying your new baby.

Breastfeeding

Breastfeeding offers many benefits for both mother and baby.

A healthy baby can benefit from breast milk, infant formula or a combination of the two. Breast milk is extremely nutritious and contains carbohydrates, proteins, and fats essential for a baby's health.

Breastfeeding, apart from helping babies get proper nutrition, can help mothers recover from pregnancy and delivery.

Breastfeeding Can

- Promote a "bond" between mother and baby
- It is natural and specially made for your baby
- There are lots of things in breast milk that are good for your baby, but are not found in formula milk
- It is safe for your baby, and easily digested

- It contains all the minerals and nutrients that your baby needs for the first six months of life. Together with other foods, it is very good for the next six months or more as well
- It is always ready when your baby needs it
- Breast milk also contains antibodies that help prevent infections and allergies. Your baby will be less likely to get infections, allergies and many other diseases
- Your baby may grow and develop better
- Breast fed babies have less chance of obesity
- It helps you and your baby feel close to each other
- Breastfeeding releases hormones which cause the uterus to shrink after delivery and also decreases bleeding. It helps your body return to normal more quickly after the birth
- Mothers who breastfeed typically have an easier time losing weight after pregnancy
- Breastfeeding also helps build a woman's bone mineral density and helps prevent osteoporosis after menopause
- It does not cost anything and does not take time to prepare

Expecting mothers planning to nurse should discuss breastfeeding with a doctor, nurse, or certified lactation consultant before giving birth. Although breastfeeding is a natural thing to do, most of us need to learn how.

If a mother does decide to breastfeed her children, she should understand that breastfeeding is a major responsibility that requires her to maintain excellent nutrition and health. Women who breastfeed should eat well-balanced, nutritious meals. Generous portions of whole grain breads and cereals, fruits and vegetables, and dairy products with an abundance of calcium are recommended. Most babies are born knowing how to breastfeed but sometimes it may take time for both of you to learn this new skill. The midwives and nurses in the hospital will help you and your baby start breastfeeding.

Breastfeeding and Coffee

Most physicians agree that it is safe for breastfeeding mothers to consume small amounts of caffeine (equivalent to one to two cups of coffee per day), though larger amounts of caffeine may interfere with a baby's sleep or cause him or her to become fussy.

Breastfeeding and Alcohol

Alcohol should be avoided by breastfeeding mothers because it can pass through breast milk to the baby. An occasional drink (no more than two ounces of alcohol) is probably safe.

Your baby and you

- New mums
- Helpful hints for parents in the first few weeks
- How will you feed your baby?
- Safe sleep for babies and toddlers
- Foods for babies (solids)
- Child development: 0-3 months
- Child development: 3-6 months
- Child development: 6-9 months
- Child development: 9-12 months

Clinic Info

Your First Appointment

Note: this page sets out some useful information for patients. Feel free to edit the generic information below that I have written.

Thank you for choosing us as your care provider.

On the day of your appointment, please arrive 10-minutes early to ensure we have enough time to prepare any outstanding paperwork.

We are mindful that your time is valuable and would like to avoid keeping you waiting. However, occasionally a patient may present that requires a little extra time spent on them, which may cause unforeseeable scheduling delays beyond our control. Where possible, we will advise you if we are running late. We apologise in advance if you are kept waiting.

During your first appointment, a thorough medical and diagnostic work-up may be required. If you have completed any tests (blood test results, MRI within 6-months, X-Ray, CT scan, etc), please bring these on the day so that A/Prof Polyakov can thoroughly review them during your appointment. A/Prof Polyakov will explain the results of any specific tests you have had done, and if indicated, recommend a treatment pathway.

If you are coming in for a fertility consultation, we encourage you to attend with your partner (where applicable), and in such a case, both you and your partner need to be listed on the referral as per Medicare requirements.

Online Registration

- Once you have secured an appointment time and date, you will be requested to complete our Online Patient Registration Form prior to your appointment so that you don't have to complete it on the day.
- If you prefer to complete your questionnaire on the day in person, then please arrive earlier to allow time for your paperwork to be completed.

What to Bring

- A current referral from your GP or Specialist
- Medicare, DVA and Pension cards
- Your Private Health Insurance details
- Any tests or scans, including blood tests, ultrasounds, X-rays, MRIs or CTs you have had done
- A list of all medications you are on (including prescription, vitamins, supplement or herbal medicines)
- Any relevant correspondence from other specialists who may be involved in your care
- List of any known allergies
- Glasses (if you wear them)

- A list of any questions you may wish to ask so you don't forget on the day

You are welcome to bring a support person to your appointment if you wish to do so.

Workers Compensation

If the condition relates to a Workers Compensation claim, please bring your claim number, approval letter for appointment, insurer details, name and contact details of your case manager.

Telehealth Consults

We happily offer telehealth consultations, but unfortunately Medicare does not offer a rebate for the initial consultation, so the first consultation is entirely out-of-pocket. Medicare rebates are available for all subsequent telehealth consultations, however.

If you have booked a telehealth consult via our team, we will send you details of how to connect. If you do not receive these, please call us.

Post-Operative Appointment

If you undergo surgery, the necessary post-operative appointments will be scheduled. These are important appointments to monitor your recovery progress and avoid complications.

Pre & Post Operative Instructions

Pre-Operative Instructions

Before Surgery

A thorough pre-operative assessment of your gynaecological and other comorbid medical conditions will be performed, and the most optimum surgical procedure will be chosen. You will be informed about all the treatment options available for your condition including alternatives for surgery and less invasive techniques. Risks and benefits of surgery will also be discussed.

Your Surgery

There are several surgical options to treat gynaecological problems such as fibroids, endometriosis and cancer. The treatment options are:

- Hysteroscopic resection of fibroids involves the removal of fibroids using a hysteroscope.
- Laparoscopy or "keyhole surgery", involves insertion of a thin tube through the abdomen to remove the fibroids. It may also be performed to remove adhesion on the uterus.
- Open surgery is one in which an abdominal incision is made to remove larger fibroids.
- Hysterectomy is the surgical removal of a part or the entire uterus and is done in cases of endometriosis, when conservative options fail and in cancer of the endometrium and uterus. It is considered only if you are not planning a pregnancy in the future.
- Oophorectomy is the surgical removal of ovaries and is done in case of ovarian cancer.
- Laparotomy is used to cut or burn tissue, or remove cysts.

Pre-Operative Information

Pre-operative care generally includes assessment and preparation of the patient for surgery. The objective of pre-operative care is to achieve best surgical outcome and alleviate a patient's anxiety. All the necessary information will be given to the patients regarding the surgical procedure, risks and complications of the surgery, and what to expect after surgery.

The general pre-operative instructions are as follows:

- On the previous day of your surgery, avoid eating or drinking anything after midnight. You may have breakfast, light lunch, and dinner.
- If you are on regular prescription medicine, you can take them with only a sip of water on the morning of your surgery.
- Avoid chewing any gum on the day of surgery.
- You should discontinue aspirin containing medications 14 days prior to your surgery.
- Inform your surgeon if you are taking blood thinning medications.
- Please inform your gynaecologist if you are having diabetes, so that special instructions will be given.
- Please bring all your medications along with you on the day of surgery.
- Do not wear contact lens or any jewellery when you come for surgery.
- Inform your gynaecologist if you have chest pain, heart problems, breathing difficulty or any physical change prior to surgery. Your surgery can be rescheduled if you have severe cold or flu like symptoms.
- Abstain from smoking, if you smoke, 24 hours before the surgery.
- Have someone to accompany and drive you home as you will not be able to drive after surgery.

Post-Operative Instructions

The post-operative period refers to the time period between the end of the surgical procedure and when you can restore back to your normal activities. During this period, normal physiological functions get restored, tissues heal from the surgical trauma and physical strength will be regained gradually.

What to Expect After Gynaecological Surgery

- You may experience mild to moderate pain at the operation site for several weeks after surgery.
- Feeling of light-headedness and nausea is common in the initial few days after surgery.
- Your incisions will be covered with surgical dressing that will be removed after 1 week of the surgery.

Post-Operative Instructions

- Do not lift heavy weights for a period of 3-months after surgery.
- There may be a risk of developing blood clots in the first few days of surgery. This can be prevented by starting to walk early after surgery, avoiding crossing of legs at ankles or knees.
- Avoid constipation.
- Eat foods that contain high fibre (fruits and vegetables) or take fibre supplements.
- Drink minimum of eight glasses of water every day.
- Use stool softeners prescribed to you.
- Gradually increase your activity level as it improves bowel function.
- Avoid sexual intercourse for 6-weeks following the surgery.
- You may return to work usually within 6-weeks after surgery.
- Avoid swimming or using bathtubs until your follow-up visit 6-weeks after surgery.

Fees & Cancellations

Consulting Fees

- We are a private clinic and charge private-practices fees. Bulk-billing at doctor's discretion.
- Full payment is required on the day of your appointment for a visit in person. We then send the claim to Medicare on your behalf and you will receive the Medicare rebate directly into your nominated bank account, usually within 2 working days.
- Private health insurance does not cover consultation costs unless you are an inpatient in the hospital.

Obstetric Fees

Simone – copy content from here: <https://www.dralexpolyakov.com.au/about/obstetric-prices>

Cancellations

If you need to cancel an appointment, please telephone our clinic during business hours and allow at least 24 – 48 hours' notice so that we can offer your appointment time to other patients that are eagerly waiting for a consultation. Same-day cancellations may attract a cancellation fee, which would need to be paid before further consultations are offered.

Telehealth

We happily offer telehealth consultations. Please get in touch with us to find out more.

Patient Resources

Simone – copy content from here (but add as a list – not thumbnails):

<https://www.dralexpolyakov.com.au/patient-information-2/information-pamphlets>

FAQs

[accordions]

Do you offer Bulk-Billing?

No, we do not. We operate a full-service private practice clinic with leading local clinical and administrative staff, along with the latest state-of-the-art diagnostic and therapeutic clinical technology, which enables us to offer patients a truly world-class clinical experience. This service is not possible to run on a Bulk-Billing model. Therefore, there are reasonable out-of-pocket expense associated with most consultations and procedures.

Do I need a GP referral?

No, you do not need a GP referral to see a specialist in Australia however, having a GP referral allows you to receive the Medicare rebate (ie: recoup a substantial amount of your consultation fees) and allows your GP to send a referral letter with your full medical history detailed, which is essential for A/Prof Polyakov to review. We strongly recommend speaking to your GP prior to considering seeing A/Prof Polyakov, simply to ensure that your issue cannot be managed by your primary care provider.

Do I receive the Medicare rebate?

If you are a Medicare card holder and want to claim the Medicare rebate, you will require a valid referral from either a GP or another Specialist to entitle you to claim your Medicare rebate.

What if I don't have a Medicare card / I am an international patient?

Patients who do not have a Medicare card, do not want to claim the Medicare rebate, or international patients do not require a referral to attend our practice and will be billed per our standard rates.

How long is a referral valid for?

GP referrals are valid for 12-months and referrals from other Specialist are valid for 3-months.

The referral starts from the date the specialist first meets the patient, not the date issued.

Can I use a referral made out to a different specialist to attend your clinic?

Yes, you can. You can use a referral that is made out to a different specialist of the same speciality/vocation (eg: another obstetrician and gynaecologist or fertility specialist). See here for more information: [healthdirect](#) and [Services Australia](#) and [NIB](#).

Do I require Private Health Insurance to be a patient?

In clinic

Private health insurance does not cover what is done in the rooms (unless you are an in-patient or overseas visitor with international travel insurance). If you are an international visitor with the necessary insurance, full payment is required at the time of the consultation, you will then be provided with a receipt to claim directly from your provider.

Surgery

No, you are not necessarily required to have private health insurance to be a patient in a private hospital. A 'self-funded' patient is someone who doesn't have Private Health Insurance, but pays cash for their medical treatment upfront. This consists of the specialist's fee, the anaesthetist's fee, the surgical assistant's fee and the hospital's fee. It's the hospital fee which makes up the vast majority of the cost.

Public Hospitals

If you are a Medicare card holder and your treatment is performed in a public hospital, there will be no fees associated with your care.

Do you offer telehealth consultations?

Yes, but unfortunately Medicare does not offer a rebate for the initial consultation, so the first consultation is entirely out-of-pocket. Medicare rebates are available for all subsequent telehealth consultations, however.

For Referrers

Note: this page sets out some useful information for GPs or other referrers. Feel free to edit the generic information below that I have written.

We are happy to receive calls or emails from referring GPs, Specialists and allied health professionals to discuss a particular patient or answer your questions. Do not hesitate to contact us to discuss something if required.

Types of Patients

A/Prof Polyakov sees all types of patients, including private, self-funded and public patients. However, we do not bulk-bill in the clinic. If a public patient needs surgery, they will be charged our normal consulting fees at the clinic, and then surgery options will be coordinated at the public hospital.

Referrals

Referrals can be sent via email, fax or sent securely using Argus, Healthlink or Oculo. Visit our [Contact](#) page for our details.

Urgent Appointments

For anything urgent in nature, we recommend you Contact our reception team directly so that we can appropriately triage the case and A/Prof Polyakov can be contacted with urgency.

Blog

Add all current ones from here: <https://www.dralexpolyakov.com.au/blog>

Contact Us

Phone number:	(03) 9486 0677
Fax number:	
Email address:	info@dralexpolyakov.com.au
Consulting locations:	Genea Melbourne City Ground Floor / 200 Victoria Parade East Melbourne, VIC, 3002

Open Hours

- Monday – Friday: 8:00am to 5:00pm

After-Hours Care

If you have a concern about your recovery or surgery, please contact the Ward at the hospital where you underwent your procedure. A nurse will be able to discuss your condition with you and will contact A/Prof Polyakov if necessary. You may be directed to contact your regular GP for support and on-going management.

If it is an emergency, please present to your closest Emergency Department.

Privacy Policy

Privacy Policy

This privacy policy relates to the [dralexpolyakov.com.au](https://www.dralexpolyakov.com.au) website.

Your privacy is important to us, and it is our policy to respect your privacy regarding any information we may collect while operating our websites.

Accordingly, we have developed this Policy in order for you to understand how we collect, use, communicate and disclose and make use of personal information. The following outlines our privacy policy.

- Before or at the time of collecting personal information, we will identify the purposes for which information is being collected.

- We will collect and use of personal information solely with the objective of fulfilling those purposes specified by us and for other compatible purposes, unless we obtain the consent of the individual concerned or as required by law.
- We will only retain personal information as long as necessary for the fulfilment of those purposes.
- We will collect personal information by lawful and fair means and, where appropriate, with the knowledge or consent of the individual concerned.
- Personal data should be relevant to the purposes for which it is to be used, and, to the extent necessary for those purposes, should be accurate, complete, and up-to-date.
- We will protect personal information by reasonable security safeguards against loss or theft, as well as unauthorised access, disclosure, copying, use or modification.
- We will make readily available to customers information about our policies and practices relating to the management of personal information.

We are committed to conducting our business in accordance with these principles in order to ensure that the confidentiality of personal information is protected and maintained. We may change its Privacy Policy from time to time at our sole discretion.

1. Terms

By accessing this website, you are agreeing to be bound by these website Terms and Conditions of Use, all applicable laws and regulations, and agree that you are responsible for compliance with any applicable local laws. If you do not agree with any of these terms, you are prohibited from using or accessing this site. The materials contained in this website are protected by applicable copyright and trademark law.

2. Use License

Permission is granted to temporarily download one copy of the materials (information or software) on this website for personal, non-commercial transitory viewing only. This is the grant of a license, not a transfer of title, and under this license you may not:

- Modify or copy the materials;
- Use the materials for any commercial purpose, or for any public display (commercial or non-commercial);
- Attempt to decompile or reverse engineer any software contained on this website;
- Remove any copyright or other proprietary notations from the materials; or
- Transfer the materials to another person or “mirror” the materials on any other server.

This license shall automatically terminate if you violate any of these restrictions and may be terminated by us at any time. Upon terminating your viewing of these materials or upon the termination of this license, you must destroy any downloaded materials in your possession whether in electronic or printed format.

3. Disclaimer

The materials on this website are provided “as is”. We make no warranties, expressed or implied, and hereby disclaims and negates all other warranties, including without limitation, implied warranties or conditions of merchantability, fitness for a particular purpose, or non-infringement of intellectual property or other violation of rights. Further, we do not warrant or make any representations concerning the accuracy, likely results, or reliability of the use of the materials on this website or otherwise relating to such materials or on any sites linked to this website.

4. Limitations

In no event shall we, or our suppliers be liable for any damages (including, without limitation, damages for loss of data or profit, or due to business interruption) arising out of the use or inability to use the materials on this website, even if we, or an authorised representative, has been notified orally or in writing of the possibility of such damage. Because some jurisdictions do not allow limitations on implied warranties, or limitations of liability for consequential or incidental damages, these limitations may not apply to you.

5. Revisions and Errata

The materials appearing on this website could include technical, typographical, or photographic errors. We do not warrant that any of the materials on this website are accurate, complete, or current. We may make changes to the materials contained on this website at any time without notice. We do not, however, make any commitment to update the materials.

6. Links

We have not reviewed all of the websites that linked to our website, and we are not responsible for the contents of any such linked website. The inclusion of any link does not imply endorsement by us of the website. Use of any such linked website is at the user’s own risk.

7. Site Terms of Use Modifications

We may revise these terms of use for our website at any time without notice. By using this website, you are agreeing to be bound by the then current version of these Terms and Conditions of Use.

8. Governing Law

Any claim relating to our website shall be governed by the laws of New South Wales, Australia, without regard to its conflict of law provisions.

General Terms and Conditions applicable to Use of a website.

Disclaimer

This disclaimer policy relates to the dralexpolyakov.com.au website.

Disclaimer

The content of this website is provided for general information purposes only. This website does not provide professional advice, and you should seek independent medical advice before relying on information available on this website.

Images used on this website may be of a stock nature and not always a true representation of the business or clinician.

While every effort has been made to ensure the accuracy, authenticity, completeness and timeliness of the information on this website, we make no warranty, express or implied, that the information on this site is comprehensive or accurate, or current. We accept no responsibility for any consequence arising from the inappropriate application of this information. This information is provided as a guide only.

Some pages on our website may contain links to other websites (external links). We make no claim as to the suitability, accuracy, authenticity or completeness of websites accessed via external links. We do not accept any liability to any person for the information or advice (or the use of such information or advice) which is provided within a linked Internet site or incorporated into it by reference.

Risks of Medical Procedures

Medical procedures can carry risks, occasionally resulting in long-term side effects. Individual factors relating to the patient may also play a role in the reproducibility of achieving a particular clinical or surgical outcome. You should consider all non-procedural options before committing to undergo a medical procedure.