

Medical Technology Summary Period 4 - 2017

For Each Technology Indicate:

How it works?

It is primarily for diagnosis or treatment?

What type of tissue is it useful for?

What body system is it used in? Could it be used in?

BOU BOU[] MRI Scan: It gives a picture of soft tissue inside the body, and the skeletal system without the need for incision. Uses magnitude and radio waves to limit radiation on the body, making it safer alternative to X-ray and CT scans. Risks of a MRI scan are displacement of any metal implants because of the use of magnets and some people may have an allergic reaction to the contrast fluid used.

[Diagnostic] MRI arthrogram: Used when the doctor can't get a clear photo with an MRI scan and injects a contrast fluid to make for better visibility.

[Treatment] Cryotherapy: Therapy that goes on to the skin and it loosens up the muscles to get rid of the pain caused by osteoporosis. It involves applying nitrogen gas to the skin to reduce body temperature for a few minutes. The treatment stimulates the regulatory functions of the body.

[Diagnostic] Endoscopy: Doctor takes a long tube with a camera on the end of it and shoves it down your throat to view your stomach and other organs.

[Diagnostic] Stereotactic Biopsy: Uses computer imaging to target where tumours, lumps, lesions, etc. on a person. It helps in removing said tumour, lump, etc. as it guides the doctor or surgeon and makes the process easier.

[Diagnostic] CT Scan: Takes multiple pictures of a part of or all of the body and can see calcium build up, eliminates risk and discomfort with traditional angiograms. It is used for diagnosis and is used for soft tissue and blood vessels. It can be used to see all body systems.

[Treatment] ICD (implantable cardioverter-defibrillator): used for people who have had irregular heartbeats, severe heart failure to treat it. The device is surgically placed and delivers pacing and electric countershock to the heart. Useful for muscle tissue.

[Diagnostic] Heartbeat Monitor: Used to monitor the heartbeat and to monitor the life of the patient or living being hooked up to the monitor. It is useful for the circulatory system and muscle tissue.

[Treatment] Chemotherapy: In general, chemo is the use of drugs to treat a disease. It varies person to person, but usually for cancer there's a cocktail of drugs used. Side effects include loss of appetite, fatigue, nausea, loss of hair,

[Treatment] Radiation: Burns your skin to slow down the growth of cancer cells.

[Treatment] Protein Patch: Patch put onto heart and puts protein into the body to help muscles grow. Muscle cells will work with this patch and the circulatory system.

[treatment] X-rays: uses rays so the doctor doesn't have to make cuts. Helps to diagnose, treat, monitor. Two types: Mammograms are used to find tumours and lumps in breasts, and barium enemas are used to look at gastro-intestinal tract. X-rays help to find bone cancer, breast tumours, blood vessels, digestive problems, tooth decay, and fractures.

Risks:

- Hives
- Itching
- Nausea
- Lightheadedness
- Metallic taste in your mouth.