

Research Assessment #17

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Subject: Final Product Assessment- Part 2

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Assessment:

For my final product, I have begun my detailed research to create my manuscript over the different types of anaesthesiology, risks of anesthesiology, and how people react differently to anesthesiology. My goal is to center my final product over these ideas and create a combined manuscript over these aspects of anesthesiology.

A carefully regulated mix of medication and anesthetics is utilized to induce general anesthesia, a medical state that leaves patients unconscious and immobile during surgical procedures or medical interventions. Vital signs, such as heart rate, blood pressure, and oxygen levels, are closely monitored by an anesthesiologist or nurse anesthetist to ensure patient safety. The effects of general anesthesia wear off gradually, and patients usually have no memory of the procedure. Although generally safe, there are possible risks and side effects that must be carefully managed by the medical team. General Anesthesia is generally performed by a nurse anesthetist (CRNA) with the help of a supervising physician (anesthesiologist). There are many different procedures CRNA's are required to perform; they are on "call" the entire surgery monitoring the anesthesia and the body's affect to the anesthesia (blood pressure, etc).

Anesthesia is chosen by the anesthesiologist along with the surgeon to ensure the best anesthesia is chosen for the patient based on their health and the procedure they are getting done. There are different reasons anesthesiologists may recommend taking anesthesia for your procedure. Some reasons may include if the procedure is gonna take a long time (this is to help with the pain from the long surgery), if the procedure may include the use of muscle relaxants or result in significant bleeding, or if the procedure can

significantly change your breathing, blood pressure, or heart rate. Other forms of anesthesia may be recommended depending on your procedure.

Risks of anesthesia are a heavy topic in the field of anesthesia. General anesthesia is generally safe and there aren't many risks associated with general anesthesia. Your risk of complications is more closely related to the type of procedure you're undergoing and your general physical health. Depending on your health, the risks of the procedure either increase or decrease because anesthesia is directly associated with the patient's health. Older adults with serious medical conditions are at increased risk of confusion after surgery. They're also at higher risk of pneumonia, stroke or a heart attack after surgery. This is particularly true if they're undergoing more-extensive procedures. Conditions that can increase the risk of complications during surgery include smoking, sleep apnea, obesity, high blood pressure (more common in adults), diabetes (type 1 and type 2), stroke, seizures, other medical conditions involving the heart, lungs, kidneys, or liver, medicines that can increase bleeding, heavy alcohol or drug use, allergies to medicine, and previous adverse reactions to anesthesia. There are many risks involved with anesthesia; this increases the pressure for the patient, the surgeon, and the CRNA/anesthesiologist.

Anesthesia awareness is very important because of the involved risks in the procedure. CRNAs and Anesthesiologists have many duties regarding ensuring the safety of the patients during surgery. From this article, I learned a lot about general anesthesia and the risks it involved; this will be very helpful in creating my final product.

Overview

General anesthesia brings on a sleep-like state with the use of a combination of medicines. The medicines, known as anesthetics, are given before and during surgery or other medical procedures. General anesthesia usually uses a combination of intravenous medicines and inhaled gasses.

You'll feel as though you're asleep. But general anesthesia does more than put you to sleep. You don't feel pain when you're under general anesthesia. This is because your brain doesn't respond to pain signals or reflexes.

An anesthesiologist is a doctor who specializes in anesthesia. In many hospitals, an anesthesiologist and a certified registered nurse anesthetist (CRNA) work together as a team during your procedure. While you're under anesthesia, the anesthesia team monitors you, watches your body's vital functions, manages your breathing and treats pain related to the procedure.

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Why it's done

Your anesthesiologist, together with your surgeon or another specialist, will recommend the best anesthesia option for you. The form of anesthesia is chosen based on the type of surgery you're having, your overall health and your preferences.

Your team may recommend general anesthesia for certain procedures. These include procedures that may:

- Take a long time.
- Require the use of muscle relaxants.
- Result in significant bleeding.
- Significantly change your breathing, blood pressure or heart rate.

Other forms of anesthesia may be recommended depending on your procedure. Spinal anesthesia may be recommended for surgery below your waist such as a cesarean section or hip replacement. Regional anesthesia may be recommended for surgery on a specific part of



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10:20 AM Today

Anesthesiology changes the way you think; it puts you to sleep.



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10:21 AM Today

The CRNA and the anesthesiologist work together and complete all their tasks. CRNA do a lot of the work.



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10:23 AM Today

Both the CRNA and the anesthesiologist both will work together to figure out what anesthesiology the patient needs.



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10:24 AM Today

The specific points in which general anesthesia is used for certain procedures.

the body such as a hand or foot. Local anesthesia may be appropriate for minor procedures that involve a small area such as a biopsy. While these forms of anesthesia are commonly combined with sedation during the procedure, they may not be appropriate for more-involved procedures.

Risks

General anesthesia is **very safe**. Most people don't have serious problems from general anesthesia. This is true even for people with significant health conditions.

Your risk of complications is more closely related to the type of procedure you're undergoing and your general physical health.

Older adults or those with serious medical problems are at increased risk of confusion after surgery. They're also at higher risk of pneumonia, stroke or a heart attack after surgery. This is particularly true if they're undergoing more-extensive procedures.

Conditions that can increase your risk of complications during surgery include:

- Smoking.
- Sleep apnea.
- Obesity.
- High blood pressure.
- Diabetes.
- Stroke.
- Seizures.
- Other medical conditions involving the heart, lungs, kidneys or liver.
- Medicines that can increase bleeding.
- Heavy alcohol or drug use.
- Allergies to medicines.
- Previous adverse reactions to anesthesia.

Anesthesia awareness

During procedures in which someone only receives sedation, it's expected that the person will be relaxed and comfortable. The person won't necessarily be asleep or unaware. It's common that someone who's sedated may be aware for part or all of the procedure.



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10:26 AM Today

Overall a safe procedure; patient doesn't have to worry too much unless have many conditions.



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all conditions that can act as risks while anesthesia is being provided to the patient.

Although very rare, a person may be partially awake during general anesthesia. Estimates vary, but about 1 or 2 people in every 1,000 may experience unintended intraoperative awareness. It is even rarer to experience pain, but this can occur as well.

This is so rare that it's hard to understand why it happens. Most cases of unintended intraoperative awareness occur during urgent or emergency surgeries. Or they occur during unexpected emergencies in routine surgeries. When it happens, a person may experience stress or anxiety. For some people, the experience can result in long-term psychological problems similar to post-traumatic stress disorder.

How you prepare

In the days or weeks before your procedure, adopt healthy lifestyle habits. You can do this by increasing your activity level, eating a healthy diet, getting plenty of sleep and stopping tobacco use. Better health before surgery can help improve your recovery after anesthesia and surgery.

Be sure to let your health care provider know about all the medicines you take. This includes prescription medicines as well as medicines, vitamins and supplements you can get without a prescription.

Some medicines are safe or even encouraged to continue throughout your surgery. But some medicines must be stopped for a day or several days before surgery. Your health care provider or surgeon can tell you which medicines to take and which medicines to stop taking before surgery.

You'll be given instructions about when to stop eating and drinking. Rules about eating and drinking are set to allow enough time for food and liquid to empty from your stomach before your procedure. Sedation and anesthesia relax the muscles in your digestive tract. This reduces your body's usual protective reflexes that help prevent food and acid from passing from your stomach into your lungs. For your safety, it's important to follow these instructions. If you don't follow instructions about when to stop eating and drinking before surgery, your procedure may be delayed or canceled.

If you have sleep apnea, discuss your condition with your surgeon and anesthesiologist. The anesthesiologist or CRNA will need to carefully check your breathing during and after your surgery. If you wear a device at night for treatment of sleep apnea, bring your device with you to the procedure.