Intermountain® Healthcare

Anesthesia for Children

What is it?

Anesthesia is the use of medications called **anesthetics** to block most feeling, including pain. These medications can affect a specific area or region of a child's body, or the whole body.

- **General anesthetics** block most sensation throughout your child's body. They cause him to lose consciousness completely.
- **Monitored anesthesia care (MAC)** is a reduced level of anesthesia that sedates (calms) your child and may allow sleep. It does not cause him to lose consciousness completely. MAC is rarely used for children during surgery.
- **Regional or local anesthetics** act on a specific region or area of the body. **Epidural** and (less commonly) **spinal blocks** are often used to numb the lower half of the patient's body. **Other nerve blocks** can be injected or given through a catheter to affect a specific area, such as an arm or leg. In children, these are commonly combined with a general anesthetic.

A doctor with specialized training will recommend anesthesia options based on your child's situation. A doctor who specializes in anesthesia care is called an **anesthesiologist**. A nurse with specialized training in anesthesia care is called a **CRNA** (Certified Registered Nurse Anesthetist).

What happens before?

- **Your child should not eat or drink for several hours before surgery. Follow these instructions carefully.** Accurately report the last time your child ate or drank. Anesthesia can cause the stomach muscles to relax. If there's anything in the stomach, it can come up, causing your child to choke or vomit. Your child could also breathe stomach contents into the lungs, which can cause serious problems.
- **A healthcare provider will take a complete medical history.** This is very important for safe anesthesia care. Be sure to report all medical problems, recent illnesses, allergies, and current medications (including vitamins, herbs, supplements, and over-the-counter medications). Also, be sure to report previous reactions to anesthesia for both your child and family members. This is essential to allow your child's anesthesia provider to plan the safest possible care.
- **Your child may have lab tests, x-rays or other tests** to evaluate health status before surgery.

What happens during?

- **Your child may have an IV catheter** (small plastic tube) placed into a vein. This allows him to receive fluids and medications.
- **Your child may have a tube inserted** through the mouth and into the trachea (windpipe) to help with breathing during surgery. This happens after your child is asleep.
- **Monitors will be used** to help the anesthesiologist continually evaluate your child's breathing, heart rate, blood pressure, and temperature.

What happens after?

What your child feels after surgery depends on the type of anesthesia used. The table on the back of this fact sheet summarizes some possible side effects. Healthcare providers will continue to work with your child to manage pain after surgery. Your child may take oral pain medication or get pain medication through an IV or catheter. He may also have a device that allows him to control how often he gets pain medication.

Is anesthesia safe?

Though **very rare**, all forms of anesthesia carry risk of severe complications such as infection, bleeding, drug reactions, blood clots, paralysis, stroke, brain damage, heart attack, or death. The table on the back of this fact sheet summarizes the most common forms of anesthesia, including benefits and potential risks. Other, less common, side effects are also possible. Be sure to ask your anesthesia provider if you have questions or concerns.

Type of anesthesia	How it's given	Actions and potential Benefits	Potential risks or side effects
General anesthesia Causes complete loss of consciousness. Used for most major surgeries.	• Anesthesia medication is given through an IV or as an inhaled gas – or both. • After your child is asleep, a tube may be inserted through her mouth into her airway to help her keep breathing.	• Can be started quickly and causes rapid loss of consciousness • Blocks most sensation, including pain	• Throat pain, hoarseness, or injury to the mouth or teeth from the breathing tube • Drowsiness, confusion, or restlessness when waking up • Teeth clenching when waking up, which may cause injury to the teeth, mouth, or dental work • Nausea or vomiting • Breathing problems, pneumonia • Very rarely, heart problems, stroke, or other life-threatening complications
Monitored anesthesia care (MAC) Calms your child and may put her to sleep, but does not cause unconsciousness. Used for minor surgeries when general anesthesia is not needed.	• Anesthesia medication is given through an IV.	• Keeps your child comfortable during surgery, and often causes sleep • Fewer side effects than general anesthesia • Allows your child to wake up more quickly after surgery	• Loss of memory for what was heard or felt during surgery • Loss of consciousness • Breathing problems • Anxiety • Nausea and vomiting • Awareness
Epidural or spinal anesthesia This type of pain relief may also be used after surgery with other types of anesthetics to help with pain management. May also be chosen as preferred anesthesia.	• **With an epidural**, a needle is inserted into the epidural space around your child's spinal canal. A thin catheter is then threaded through the needle. The needle is removed and the catheter stays in place. This way, medication can be given through the catheter more than one time, with dosage increased or decreased as needed. • **With a spinal block**, medication is injected through a needle directly into the spinal canal in your child's lower back.	• Blocks most feeling from the waist or chest down • Takes effect quickly • Your child may remain awake • Medication can be given through a catheter more than one time, with dosage increased or decreased as needed • May also be used to give other types of pain medication after surgery	• Headache or backache • Buzzing in the ears • Convulsions • Low blood pressure • Dizziness or lightheadedness • Nausea or vomiting • Numbness spreading too high in the body, resulting in the need for a breathing tube • Blood-vessel injury or infection • Unrelieved pain • Very rarely, permanent injury or death • Itching
Local anesthesia / nerve block May be chosen as a preferred anesthesia.	• Pain medication is injected into the skin or muscle around the incision, near a joint, or near a specific nerve. • A catheter may be placed so that more medication can be given as needed.	• Temporary loss of feeling and/or movement of a specific limb or area • Very few side effects • Your child may remain awake	• Infection • Convulsions • Persistent numbness • Weakness • Unrelieved pain • Blood-vessel injury or infection

Notes

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