

How Safe is Anesthesia? What are the Risks?

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The administration of an anesthetic is an intrinsically hazardous undertaking and anesthesiologists and others have struggled to determine exactly how safe is the administration of an anesthetic and how frequent the occurrence of serious bad outcomes. The difficulty in placing a number on anesthesia safety has to do with the nature of the surgical patients and the operations that are performed since these variables change over time. During the last 15 to 20 years, more sophisticated monitoring devices and better anesthetic drugs have contributed substantially to making anesthetics safer. For relatively healthy patients, death related only to the anesthetic is somewhere between one in 150,000 to one in 250,000. There is substantial difficulty in separating out causes of death in surgical patients who have received an anesthetic since the cause is due to multiple factors that include the nature of the operation, preexisting medical conditions, and of course, the anesthetic itself. The single best way to determine the anesthetic risk in any individual case is for the patient to ask the anesthesiologist about the risks during the pre-anesthetic evaluation.

Anesthetic risk can be minimized by the patient providing complete information regarding health history, drug usage, and by carefully following instructions regarding fasting for both solid food and liquids, and following instructions regarding taking or not taking medication that is used on a regular basis. The anesthetic risk also is influenced by whether the operation is emergency or nonemergency (elective).

There are risks that can occur with the administration of any anesthetic. Common minor side effects that some patients experience are: nausea and vomiting, headache, backache, sore throat or hoarseness, and muscle soreness.

Other side effects or complications that are much more rare include, but are not limited to:

- Eye injury/blindness
- Lung complications
- Infection
- Damage to veins or arteries
- Damage to mouth, teeth or vocal chords
- Heart or blood pressure complications
- Brain damage
- Allergic reaction
- Prolonged recovery from anesthesia
- Seizure or stroke
- Nerve damage (including numbness, pain or paralysis)
- Awareness or recall of the operation
- Death

If you are pregnant, any elective surgery should be postponed until after the baby is born. If surgery and anesthesia are necessary during pregnancy, the risks to the baby could include, but are not limited to, birth defects, premature labor, permanent brain damage and death.

As previously stated, the frequency of occurrence of any side effects or complications related to the anesthetic is extremely variable. The education, training and experience of the individual providing the anesthetic care is an important factor.

Because an anesthetic is in itself potentially dangerous, even though the safety of anesthesia has improved over the last 20 years, anesthesia still contributes to serious adverse events and avoidable deaths.