Often prior to surgery a doctor will need to administer a drug called an anesthetic to prevent patients from feeling pain during a medical procedure. There are four main types of anesthesia, and the type administered depends on many factors such as the extent of the procedure and the patient’s current health. An appropriate anesthesia care plan must be created by a physician anesthesiologist for an individual patient.

**Local anesthesia:** numbs one small area of the body and the patient stays awake during the procedure.

**Regional anesthesia:** blocks pain in a larger area of the body, such an arm or leg. Epidural anesthesia, which is sometimes used during childbirth, is one type of regional anesthesia.

**General anesthesia:** affects the whole body as the patient goes into a coma-like state where the anesthetized brain does not respond to pain signals or surgical manipulations. General anesthesia is commonly produced by a combination of intravenous drugs and inhaled gasses. The patient has no memory of the procedure afterwards.

**Intravenous (IV) sedation:** the patient can be conscious, but most IV sedation is general anesthesia. It is used in surgery or gastrointestinal endoscopies. Levels are defined by whether the patient can be awakened under sedation.

**What happens when patients receive anesthesia?**

In the operating room the physician anesthesiologist provides continual medical assessment of the patient as well as diagnosis and treatment of medical problems and complications. Under anesthesia it is critical that the patient is closely monitored and vital life functions are managed carefully, including heart rate and rhythm, breathing, blood pressure, body temperature and body fluid balance. The physician anesthesiologist controls the patient's pain and level of unconsciousness to make conditions ideal for a safe and successful surgery.

**Anesthesiologists’ responsibilities include:**

- Evaluate patients’ current health prior to receiving anesthesia to ensure the best possible outcome
- Administer anesthesia and monitor patient condition during surgery
- Assess patients after their medical procedure is completed
- Supervise any non-physician nurse anesthetist or anesthesiologist assistant

The administration of anesthesia is a complex and technically-demanding medical procedure that requires physician supervision. An anesthesiologist is a specially trained doctor, and it is important to ensure that all types of anesthesia are administered by a licensed physician.