

## **Transesophageal Echocardiography (TEE)**

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TEE is a tool used to perform an ultrasound (picture obtained using sound waves) of the heart during surgery. Many people are familiar with a transthoracic echocardiogram, which is an ultrasound of the heart performed by placing the probe on the chest. A TEE gives a similar picture, but the ultrasound is done in a different manner. With the patient asleep under general anesthesia or sedated, a tube with an ultrasound probe on the end is placed down the esophagus, and the heart is visualized through the esophagus. This provides a clearer picture of the heart, since the sound waves do not have to go through as much tissue. This is a procedure that is often done in patients with heart (especially valve) disease and also in patients who are extremely sick or who are having major surgery.

The ultrasound images are a helpful monitor for anesthesiologists in a number of ways. If a patient is having heart surgery, or heart valve surgery, it allows your anesthesiologist to visualize the heart's valves and pump function during the procedure. He/she can then provide immediate feedback to the surgeon on the quality of the repair. Your surgeon can then modify his/her repair as indicated during the same operation. In patients who are extremely ill, have severe heart disease, or who are having major operations, anesthesiologists use the TEE as a monitor in addition to blood pressure, heart rate, and blood oxygenation. It allows him/her to see in real time how the heart is functioning. This helps your anesthesiologist to make informed decisions on what medications and fluids will best be used for the particular situation present for this patient.