PARAVERTEBRAL BLOCK ANESTHESIA FOR BREAST CANCER SURGERY

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Approximately one in eight women are diagnosed with breast cancer every year in the United States. For women having breast cancer surgery, the standard anesthetic technique is general anesthesia. At Duke Ambulatory Surgery Center, the majority of breast surgeries are performed under a regional anesthesia technique known as the paravertebral block (PVB). PVB's are accomplished by injecting local anesthetic alongside the spine into the paravertebral space. The local anesthetic follows the nerve pathway wrapping around the chest to the breast, thus causing the breast area to be numb. This form of anesthesia combined with intravenous sedation eliminates the need for general anesthesia with endotracheal tubes or laryngeal mask airways. Our surgery center regional anesthesia team composed of anesthesiologists and registered nurses have performed more than 7,000 PVB's since 1998 in the outpatient setting.

PVB's have become the standard of practice at Duke as a result of overwhelming positive outcomes. Preop nurses assist with PVB's by providing sedation, assisting with positioning, injecting local anesthetic as instructed, and continuously monitoring the patient for safety. PACU nurses assess the patients just as they would for patients having general anesthesia. However, because the patients have PVB's with sedation only, they are alert with minimal to no pain or nausea and vomiting. Family members are able to visit in PACU earlier to provide emotional support for the patient. The duration of stay in PACU is shorter due to the patient's comfort level.

Overall our patient outcomes are impressive. Our data proves that paravertebral blocks for breast surgery provides adequate anesthesia for the surgical procedure, requires less nursing interventions in PACU, and improves patient satisfaction scores in nursing care and overall surgical experience.