

## Unsung Hero: Your Anesthesiologist New York (Nov 1, 2011)



Panchali Dhar, M.D., anesthesiologist at NewYork-Presbyterian.

Dr. Jones scrubbed, donned her gown, mask, and cap, and entered the O.R., where she worked with intense focus for several hours during major surgery. Her efforts there saved the patient's life. Question: is Dr. Jones a surgeon – or an anesthesiologist? The answer is, she could be either one. While surgeons use their tools to diagnose and treat diseases during an operation, anesthesiologists support patients' lives, transfusing blood, maintaining their blood pressure and oxygen levels, monitoring their vital signs, and guiding them safely through the procedure. But despite their central role in surgery many people have very little idea what an anesthesiologist does.

"Anesthesiologists wear many hats during surgery, Panchali Dhar, M.D., an anesthesiologist at NewYork-Presbyterian/Weill Cornell Medical Center explained.

"They are the pharmacist in the operating room, the cardiologist, the pulmonologist, the respiratory care therapist. The doctor that's putting you to sleep is also the doctor that's transfusing blood, that's checking your lab results, and making sure your pain is controlled after surgery."

The anesthesiologist's work does not start in the O.R.; they are involved in each patient's case long before patients are wheeled into the surgical suite. "We interview every patient before surgery, and go over their medical history, chart, lab results, tests, any other significant surgeries or past issues," said Dr. Dhar. "We discuss their expectations, fears, and concerns, and talk about pain control or other issues they may face in the recovery room and after they go home."

Patients getting general anesthesia, as opposed to the lighter or more focused forms of anesthesia called sedation or regional anesthesia, receive a cocktail of drugs. This mixture includes hypnotic drugs to induce sleep, amnesia drugs to block out memories of the operation, narcotics to blunt pain, and a muscle relaxant to ensure that patients don't move during surgery. "This powerful mixture affects every organ in the body, and slows down or changes organ function," said Dr. Dhar. For this reason anesthesiologists closely watch patients once they're anesthetized. "We're monitoring their heart rate, blood pressure, oxygen level, exhaled CO<sub>2</sub>, temperature; we're looking at the patient's face, even if they're asleep, to make sure everything is okay; we are watching to make sure the surgeon is doing the surgery according to plan."

Depending on a patient's condition coming into surgery, his or her anesthesia care can be more or less complex. Dr. Dhar said there is a wide range of interventions that an anesthesiologist may need to do. "If a patient is critically ill, you're making a decision every second during the case: whether to give more fluids or blood, change the dose of anesthetic, support the patient with other supplemental drugs, or change blood pressure."

Once the surgeon has finished his or her work, the anesthesiologist decides whether to wake patients or keep them asleep with a breathing tube in and take them to the recovery room for further treatment. "When we turn off the anesthetic body functions gradually return to normal," Dr. Dhar explained. "The healthier you are, the faster you snap back. The sicker you are, the slower your recovery is likely to be." Patients moved to a surgical intensive care unit are likely to remain in the care of an anesthesiologist, as these specialized ICUs are often managed by anesthesiologists with training in critical care medicine.

Anesthesiologists are key players in the O.R., but they can be found in more and more settings outside traditional surgery, providing pain control to people who suffer from chronic pain, for example, or overseeing patients' in a critical care setting.

Like other doctors, anesthesiologists are caring for a changing population of patients that includes growing numbers of obese and elderly people, which present challenges to the anesthesiologist. "So many people are now morbidly obese – we routinely encounter patients who are 400 or 500 pounds," Dr. Dhar said. Hospitals now furnish special operating rooms with oversized equipment like beds and blood pressure cuffs. Sedation is problematic for obese patients because they have trouble lying flat for long periods, and these patients are more likely to need a breathing tube, as their oxygen levels can fall quickly. Even simple procedures like placing an IV line are challenging in obese patients, "because you may not be able to see their veins," Dr. Dhar said.

As our health care system evolves you're likely to encounter anesthesiologists in more and varied settings. Look for them – they're the doctors wearing many hats.

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