

# Improving thyroid surgery

TODAY, OPERATIONS INVOLVING THIS GLAND—AND THE PARATHYROIDS NEAR IT—ARE SAFER AND MORE EFFECTIVE

**RECENT ADVANCES HAVE** dramatically enhanced surgery on the thyroid and parathyroid glands, helping patients recover more quickly and avoid potential complications, according to Darsit Shah, M.D., and Vin Prabhat, M.D., board-certified and fellowship-trained head and neck surgeons at Monmouth Medical Center.

The thyroid is a butterfly-shaped gland in the middle of the lower neck on either side of the windpipe. “It releases hormones that influence the growth and maturation of tissues during development and oversees all of the body’s metabolic functions,” says Dr. Shah. Occasionally the thyroid produces too much of these hormones (hyperthyroidism) or too little (hypothyroidism), resulting in a variety of problems in energy level, heart rate, temperature tolerance, mood, weight or hair and skin quality.

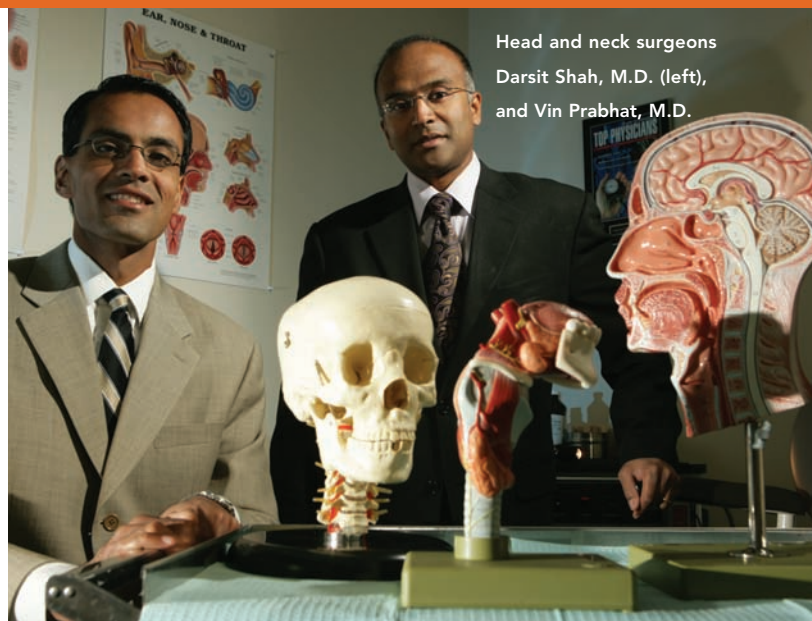
The parathyroids are four glands the size of small peas that flank the thyroid. They release hormones that regulate levels of calcium, which helps nerves and muscles function in tandem and affects bone mass. Parathyroid disorders can cause kidney stones, bone disease (including osteoporosis) with pain, stomach ulcers and depression. “At Monmouth, parathyroid surgery is more accurate today because of a technique called intraoperative parathyroid hormone assay, which helps to assure that the offending gland has been removed,” says Dr. Prabhat.

Thyroid surgery is usually done for three conditions:

- 1. A nodule or growth.** “Smaller nodules are often found when a patient has a scan for a different reason,” says Dr. Shah. Because of such incidental findings, the volume of thyroid surgery has sharply increased. Cancerous growths more than 1 centimeter across usually require total thyroidectomy, while smaller cancers and benign growths may be treated by removing only a portion of the gland.

- 2. An enlarged thyroid.** Sometimes the gland becomes progressively enlarged, causing difficulties in breathing or swallowing. Here either all or part of the

To learn more about thyroid surgery at Monmouth Medical Center, please call 1-888-724-7123.



Head and neck surgeons Darsit Shah, M.D. (left), and Vin Prabhat, M.D.

gland may be removed, depending on its size.

- 3. An overactive thyroid.** Some thyroid glands produce hormones in excessive amounts. This can be life-threatening, causing heart palpitations or arrhythmias. For such patients, doctors often recommend a subtotal thyroidectomy—removing a large portion of the thyroid, but leaving enough tissue to release adequate hormones.

The surgeons say three advances have helped to make this surgery at Monmouth safer and more effective:

- 1. Nerve monitoring.** The recurrent laryngeal nerve, which controls vocal cord function, runs underneath the thyroid. In all thyroid operations today at the medical center, small electrodes are placed adjacent to the vocal cords to track the location of this nerve, helping the surgeon avoid damaging it and causing long-term hoarseness.

- 2. The Harmonic scalpel.** This is a surgical tool that uses ultrasound waves to cut tissue and seal blood vessels at the same, reducing bleeding and enabling the procedure to be completed more quickly. Recently a new handpiece was introduced that is specifically designed for the delicate technique required for thyroid surgery.

- 3. Minimally invasive endoscope-assisted surgery.** In some cases, surgeons employ an endoscope—a narrow fiber-optic tube—that allows them to use a smaller incision, with less scarring and quicker recovery. Drs. Prabhat and Shah were trained in this procedure by its top world practitioner, Paolo Miccoli, M.D., of Italy.

“We’ve performed more than 1,000 thyroid and parathyroid operations and our rate of the main complications—hoarseness or calcium deficiency—is far below the national averages,” says Dr. Prabhat. “This shows the high quality of this surgery being done at Monmouth.” ■