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### **Parathyroidectomy**

The parathyroid glands are usually four in number and lie in the lower neck just behind the thyroid gland. They are normally the size of a printed capital letter "O". Their job is to regulate the level of calcium in the blood and bones. Over activity of the parathyroid glands can cause thin bones, bone pain, elevated calcium in the blood, high blood pressure, kidney stones, decreased memory, and difficulty with concentration.

Over activity of the parathyroids is diagnosed by blood and urine tests. A parathyroid scan may help to identify which of the glands is enlarged. If the scan shows the enlarged gland, the incision to remove it may be smaller than it would have to be otherwise.

Parathyroid surgery is most often done under general anesthesia and takes about an hour or more. A small incision is made in the neck and the enlarged gland or glands are removed. The level of the hormone made by the glands is followed during the surgery to make sure it falls before the operation is finished.

Patients are either sent home on the day of the surgery or stay overnight at the hospital. Most are back to normal activities in less than a week.

Complications during parathyroid surgery are uncommon. They include bleeding, infection, failure to find the enlarged parathyroid gland, hoarseness, and low blood calcium. Bleeding is usually minimal and results in temporary bruising of the neck. Infection is very rare. Occasionally the enlarged parathyroid gland is hidden in an unusual location such as in the chest or high in the neck near the tongue. If the gland can't be found at surgery, specialized tests can be done thereafter to try and identify the location of the abnormal gland. Hoarseness occurs in about 2-5% of patients after parathyroid surgery and clears in over 95% within a few weeks to months. Removal of the enlarged parathyroid gland(s) often produces low calcium levels until the bones build back to normal and the remaining parathyroid glands begin to work normally. Supplemental calcium may be needed during this time.

Parathyroid gland enlargement is not cancerous in the vast majority of patients.

Parathyroid surgery requires a careful and delicate touch. We at Rocky Mountain Surgical Associates have performed several hundred of these procedures. Our aim is to resolve the problem with a small incision and with minimal complications.