

What are adrenal glands?

The adrenal glands are small, darkly colored organs found in the area near the top of each kidney. These glands are hormone machines, which affects many other systems in the body. This includes body fluid and salt regulation, adrenalin (or epinephrine), blood pressure, muscle development, sexual drive, and sugar metabolism.

Diagnosis of adrenalectomy

The diagnostic testing required for adrenal conditions is complex, and is dependent on the type of tumor. Often a complete endocrine work-up will help determine whether the adrenal gland is acting alone, or indicate if a pituitary tumor is driving the adrenal gland to produce more hormones. A CT of the pituitary, blood hormone levels, and an appropriate consultation with specialists are required.

Treatment of adrenalectomy

Usually only one adrenal gland is absolutely necessary to sustain a normal life. Taking out an adrenal gland, called adrenalectomy, is performed for both malignant and benign health conditions. Conditions that benefit from adrenalectomy include: pheochromocytoma, benign tumors as evidenced by CT findings, cysts, or tumors which secrete hormones. The laparoscopic technique offers excellent visualization of the adrenal structure and also gives the surgeon the ability to look at both left and right adrenals without the long incisions once required. Removal of one adrenal gland can adequately be done by laparoscopic methods. It is very rare that both adrenal glands are malfunctioning, but if both are removed (and sometimes with one gland removed) hormone replacement therapy may be necessary. Close postoperative follow up with a physician specializing in endocrinology is mandatory.