

Pituitary Gland Tumor - Overview [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 09/2013

ON THIS PAGE: You will find some basic information about this disease and the parts of the body it may affect. This is the first page of Cancer.Net's Guide to Pituitary Gland Tumor. To see other pages, use the menu on the side of your screen. Think of that menu as a roadmap to this full guide.

About the pituitary gland

The pituitary gland is a small gland located near the brain. This gland is often referred to as the "master endocrine gland" because it releases hormones that affect many bodily functions. The pituitary gland is controlled by the hypothalamus, a small structure also near the brain that is connected to the pituitary gland. A pituitary gland has two lobes, the anterior (front) and the posterior (back), and each lobe is responsible for releasing specific hormones. These different hormones include:

Anterior pituitary lobe hormones

- Thyroid stimulating hormone (TSH) stimulates the thyroid gland, which helps regulate the body's metabolism
- Adrenocorticotrophic hormone (ACTH) controls the hormones released by the adrenal gland that support blood pressure, metabolism, and the body's response to stress
- Gonadotropins (Follicle stimulating hormone or FSH and Luteinizing hormone or LH) stimulate production of sperm in a man's testicles or eggs in a woman's ovaries and regulate a woman's menstrual cycle
- Growth hormone promotes growth of the long bones in the arms and legs, thickens the skull and bones of the spine, and causes the tissue over the bones to thicken
- Prolactin stimulates milk production in women after childbirth
- Lipotropin stimulates the movement of fat from the body to the bloodstream
- Melanocyte stimulating hormone (MSH) regulates the production of melanin, the pigment in skin

Posterior pituitary lobe hormones

- Oxytocin stimulates contraction of the uterus during childbirth and the flow of milk during breastfeeding
- Antidiuretic hormone (called vasopressin) increases reabsorption of water by the kidneys and allows a person to stay hydrated

Tumors in the pituitary gland

When normal cells change and grow uncontrollably, they can form a mass called a tumor. A pituitary gland tumor can be benign (noncancerous and located only in the pituitary gland) or malignant (cancerous, meaning it can spread beyond the pituitary gland). Most often, pituitary gland tumors are noncancerous growths and are called pituitary adenomas. However, a pituitary gland tumor can occasionally act like a cancerous tumor by growing into nearby tissue and structures, or rarely, spreading to other parts of the body.

Pituitary gland tumors are NOT brain tumors, as the pituitary gland is located under the brain and is separate from the brain. It is classified as an endocrine tumor [3]. However, a tumor in this gland can be very serious because a pituitary gland that does not work can cause problems with other organs. This is because the tumor starts in cells that make hormones, so the tumor itself can make too many hormones (called a "functional" tumor) or it can cause the gland to produce too few hormones. The tumor can also press on nearby structures, such as the optic nerves, limiting a person's sight.

To continue reading this guide, use the menu on the side of your screen to select another section.

Links:

[1] <http://www.cancer.net/cancer-types/pituitary-gland-tumor/overview>

[2] <http://www.cancer.net/about-us>

[3] <http://www.cancer.net/node/18743>