

Pituitary Gland Tumor - Introduction [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 03/2016

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. 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 2 lobes, the anterior, or front, and the posterior, or back. 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, which supports blood pressure, metabolism, and the body's response to stress.
- Gonadotropins, a family of hormones that include follicle stimulating hormone (FSH) and

luteinizing hormone (LH), stimulate production of sperm in a man's testicles or eggs in a woman's ovaries. Gonadotropins also regulate a woman's menstrual cycle.

- Growth hormone promotes growth of the long bones in the arms and legs, and thickens the skull and bones of the spine. The hormone also causes the tissue over the bones to thicken.
- Prolactin stimulates milk production in women after childbirth. Prolactin is also found in men.
- 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, also known as vasopressin, increases reabsorption of water by the kidneys and allows a person to stay hydrated.

Tumors in the pituitary gland

A tumor begins when healthy cells change and grow out of control, forming a mass called a tumor. A pituitary gland tumor can be cancerous or benign. A cancerous tumor is malignant, meaning it can grow and spread to other parts of the body. A benign tumor means the tumor can grow but will not spread.

Most often, pituitary gland tumors are noncancerous growths 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. 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. This is called a “functional” tumor. The tumor can also cause the gland to produce too few hormones. If the tumor presses on nearby structures, such as the optic nerves in the eye, it can limit a person’s sight.

The [next section in this guide is Statistics](#) [4]. It helps explain how many people are diagnosed with this disease and general survival rates. Or, use the menu to choose another section to continue reading this guide.

Links

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

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

[3] <http://www.cancer.net/node/31313>

[4] <http://www.cancer.net/node/19537>