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## PITUITARY ADENOMA

Pituitary adenoma is a benign tumor in the pituitary gland. This gland is about the size of a pea and sits on a bony cavity at the base of the brain. It is considered the master gland that regulates the secretion of many important hormones throughout the body.

Pituitary adenomas represent approximately 10 percent of all brain tumors. They are classified based on what type of hormone is secreted by the tumor. If it is not secreting any hormone, it is termed a "non-functioning tumor."

### Symptoms

Many pituitary adenomas do not cause symptoms. However, if a tumor grows large enough, it can cause headaches and visual loss by pushing on nearby structures. If it pushes on the pituitary gland, symptoms can include low blood pressure, fatigue, weakness, symptoms of hypothyroidism and a decreased sex drive.

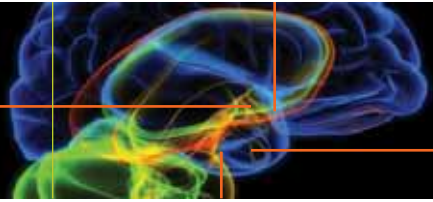
If the tumor secretes hormones, the symptoms depend on which hormones are being released.

### ***Adrenocorticotrophic hormone (ACTH)***

- rapid weight gain
- rounding of the face
- excess sweating, easy bruising
- skin dryness
- stretch marks
- hirsutism (facial male-pattern hair growth)
- insomnia
- reduced libido
- impotence
- absent or skipped menstrual periods
- psychological disturbances
- high blood pressure
- high blood sugar
- impaired wound healing
- sore and aching joints

### ***Prolactin (also known as prolactinoma)***

- irregular or absent menstrual periods
- milky discharge from the breasts
- vaginal dryness
- erectile dysfunction
- enlarged breasts
- decreased libido



*continued*

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**Growth hormone**

- enlargement of the hands, feet, nose, lips and ears
- thickening of the skin
- deepened voice
- change in facial appearance with brow protrusion
- lower jaw protrusion
- enlargement of the tongue

**Thyroid-stimulating hormone (TSH)**

- increased appetite
- weight loss
- intolerance to heat
- hair loss
- muscle aches
- weakness
- fatigue
- hyperactivity
- anxiety
- excessive sweating.

**Diagnosis**

Pituitary adenomas are usually diagnosed with an MRI scan, though large tumors can sometimes be seen on a CT scan. The tumor can also be diagnosed through blood tests for hormone levels.

**Treatment**

Pituitary adenoma treatment depends on several factors. Some are successfully treated with medication or radiation therapy. However, if the tumor is growing, compressing important structure or secreting hormones, it will require surgical resection. A variety of surgical approaches are available. Majority of the tumors can now be accessed through the nose (transnasal transsphenoidal approach) using endoscopes or microscopes.

**Recovery**

The prognosis for the treatment or removal of pituitary tumors is excellent. However, any damage done by the tumor, such as visual loss, cannot be repaired. Also, hormonal deficiencies caused by tumor compression cannot be reversed and hormonal supplements may be required.