

## Prolactinomas

**Prolactinomas** are a type of benign (noncancerous) tumor of the pituitary gland that produces excess prolactin, a hormone.

The pituitary gland is located inside the skull, below the brain, and releases many types of hormones that affect the activity of other organs, including reproductive organs. One of these hormones, prolactin, is secreted by the **lactotroph cells** of the pituitary gland. Prolactinomas arise from uncontrolled replication of these lactotroph cells and are the most common type of pituitary tumor.

### Symptoms

When prolactin is secreted in large amounts, it can cause a variety of symptoms. Some of these symptoms differ depending on the age and sex of an individual.

In premenopausal women, an excessive amount of prolactin (**hyperprolactinemia**) can reduce fertility by causing menstruation to be infrequent (**oligomenorrhea**) or absent (**amenorrhea**). This happens because prolactin can prevent the body from making other hormones. Less commonly, hyperprolactinemia can also stimulate milky nipple discharge (**galactorrhea**). If a prolactinoma is large, patients may also experience headaches or vision changes as the tumor compresses other structures.

In postmenopausal women, who do not have menstrual cycles, symptoms are more commonly associated with the size of the prolactinoma, such as headache or vision changes. Hormone levels are also lower after menopause, so galactorrhea is even less likely.

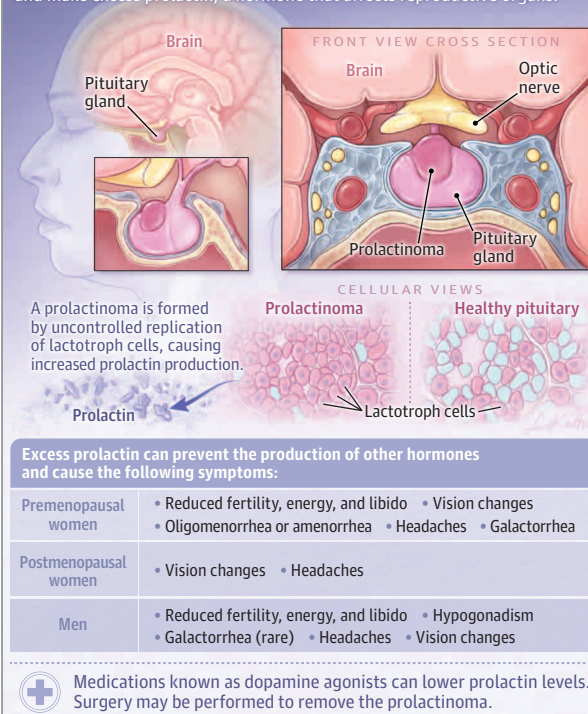
Prolactinomas can also cause headaches and vision changes in men, as well as changes in fertility, energy, or libido (interest in sex). Like in women, prolactin can affect the ability of the body to produce other hormones; for example, it can reduce production of testosterone (**hypogonadism**). In rare cases, men with prolactinomas may also experience galactorrhea.

### Diagnosis

If a clinician suspects that a patient's symptoms are due to high levels of prolactin, the diagnosis can be established by measuring prolactin through a blood test. Patients with symptoms such as vision changes or headaches may also undergo imaging such as brain magnetic resonance imaging to look at the pituitary gland.

Some medications may have side effects that stimulate prolactin secretion. A clinician should review a patient's medications to see if this might be the case.

**Prolactinomas** are common benign tumors that grow in the pituitary gland and make excess prolactin, a hormone that affects reproductive organs.



### Treatment and Management

Prolactinomas are noncancerous tumors and can be treated in different ways. One treatment is a medication called a **dopamine agonist**, which works by lowering prolactin levels. This can help reduce the size of a prolactinoma and improve symptoms. Another method of treatment involves surgery to remove the prolactinoma.

### FOR MORE INFORMATION

National Institute of Diabetes and Digestive and Kidney Diseases  
[www.niddk.nih.gov/health-information/endocrine-diseases/prolactinoma](http://www.niddk.nih.gov/health-information/endocrine-diseases/prolactinoma)

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