

Prolactinoma

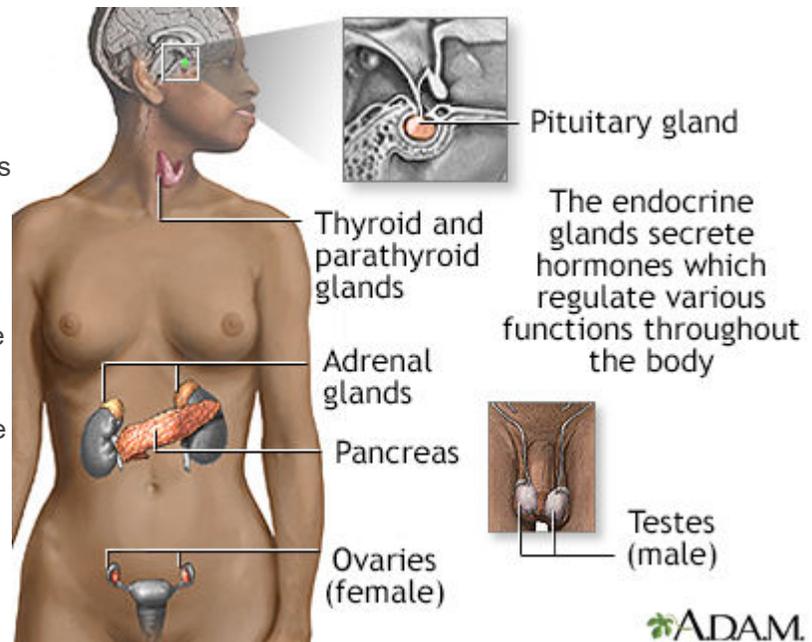
Definition

A prolactinoma is a noncancerous (benign) pituitary tumor that produces a hormone called prolactin. This results in too much prolactin in the blood.

Causes

Prolactin is a hormone that triggers the breasts to produce milk (lactation).

Prolactinoma is the most common type of pituitary tumor (adenoma) that produces a hormone. It makes up about 30% of all pituitary adenomas. Almost all pituitary tumors are noncancerous (benign). Prolactinoma may occur as part of an inherited condition called multiple endocrine neoplasia type 1 (MEN 1).



Prolactinomas occur most commonly in people under age 40. They are more common in women than in men but are rare in children.

At least half of all prolactinomas are very small (less than 1 centimeter or 3/8 of an inch in diameter). These small tumors occur more often in women and are called microprolactinomas.

Larger tumors are more common in men. They tend to occur at an older age. The tumor can grow to a large size before symptoms appear. Tumors larger than 3/8 inch (1 cm) in diameter are called macroprolactinomas.

The tumor is often detected at an earlier stage in young women than in men because the high prolactin causes irregular menstrual periods.

Symptoms

In women:

- Abnormal milk flow from the breast in a woman who is not pregnant or nursing (galactorrhea)
- Breast tenderness
- Decreased sexual interest
- Decreased peripheral vision
- Headache
- Infertility
- Stopping of menstruation not related to menopause, or irregular menstruation
- Vision changes

- Decreased sexual interest
- Decreased peripheral vision
- Enlargement of breast tissue (gynecomastia)
- Headache
- Erection problems (impotence)
- Infertility
- Vision changes

Symptoms caused by pressure from a larger tumor may include:

- Headache
- Lethargy
- Nasal drainage
- Nausea and vomiting
- Problems with the sense of smell
- Sinus pain or pressure
- Vision changes, such as double vision, drooping eyelids, or visual field loss

There may be no symptoms, especially in older men.

Exams and Tests

The health care provider will perform a physical exam and ask about your symptoms. You will also be asked about medicines and substances you are taking.

Tests that may be ordered include:

- Pituitary MRI or brain CT scan
- Testosterone level in men
- Prolactin level
- Thyroid function tests (important because an underactive thyroid can mimic a prolactinoma - pseudoprolactinoma)
- Other tests of pituitary function

Treatment

Medicine is usually successful in treating prolactinoma. Some people have to take these medicines for life. Other people can stop taking the medicines after 2 to 3 years, especially if their tumor was small (less than 1 centimeter) when it was discovered or has disappeared from the MRI. But there is a risk that the tumor may grow and produce prolactin again, especially if it was a large tumor.

A large prolactinoma can sometimes get larger during pregnancy.

Surgery may be done for any of the following:

- Symptoms are severe, such as a sudden worsening of vision
- You are not able to tolerate the medicines to treat the tumor
- The tumor does not respond to medicines

both medicine and surgery have been tried. Radiation may be given in the form of:

- Conventional radiation
- Gamma knife (stereotactic radiosurgery) -- a type of radiation therapy that focuses high-powered x-rays on a small area in the brain.

Outlook (Prognosis)

The outlook is usually excellent but depends on the success of medical treatment or surgery. Getting tested to check whether the tumor has returned after treatment is important.

Treatment for prolactinoma may change the levels of other hormones in the body, especially if surgery or radiation is performed.

High levels of estrogen or testosterone may be involved in the growth of a prolactinoma. Women with prolactinomas should be followed closely during pregnancy. They should discuss this tumor with their provider before taking birth control pills with a higher than usual estrogen content.

Untreated pituitary adenomas always have a small risk of suddenly getting bigger, most commonly from bleeding inside the tumor. This is called pituitary apoplexy, and it is a medical emergency. Most people with pituitary apoplexy describe it as having the worst headache of their life.

When to Contact a Medical Professional

See your provider if you have any symptoms of prolactinoma.

If you have had a prolactinoma in the past, call your provider for a general follow-up, or if your symptoms return.

Alternative Names

Adenoma - secreting; Prolactin - secreting adenoma of the pituitary

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