

Prolactinoma

Prolactinoma is a prolactin secreting tumor of the pituitary gland. This tumor is the most common adenoma of the pituitary gland. These tumors are benign but can cause symptoms due to elevated prolactin levels in the blood or by compression of nearby structures. Prolactin is the hormone that stimulates the breast to produce breast milk. Therefore, elevated prolactin levels are usually seen during pregnancy and after childbirth. Pathologic secretion of prolactin from prolactinomas can cause galactorrhea in women although rare in men because insufficient breast tissue. Prolactin also inhibits the release of gonadotropin releasing hormone. Normally, GnRH stimulates release of FSH and LH from the anterior pituitary, which plays an important role in the synthesis of sex hormones. Increased prolactin can therefore cause decreased levels of sex hormone in men and women, leading to impotence and amenorrhea, respectively. Enlargement of the tumor can lead to compression of the optic chiasm resulting in bitemporal hemianopia. Dopamine physiologically suppresses prolactin secretion and is used in the treatment of prolactinomas.



PLAY PICMONIC

Pituitary Adenoma

[Pitbull-terrier Add\(+\)](#)[gnome](#)

This tumor is the most common adenoma of the pituitary gland.

Galactorrhea

[Lactating and pumping breast milk](#)

Prolactin is the hormone that stimulates the breast to produce breast milk. Therefore, elevated prolactin levels are usually seen during pregnancy and after childbirth. Pathologic secretion of prolactin from prolactinomas can cause galactorrhea in women although rare in men because insufficient breast tissue.

Prolactin Inhibits Gonadotropin Releasing Hormone

[Inhibited Gopher Hormone-hearts](#)

Prolactin physiologically inhibits the release of gonadotropin releasing hormone. Normally, GnRH stimulates release of FSH and LH from the anterior pituitary, which plays an important role in the synthesis of sex hormones.

Impotence

[Limp-hose](#)

Impotence is defined as inability to achieve or maintain an erection and is caused by decreased testosterone levels in men caused by prolactin inhibiting the release of gonadotropin releasing hormone.

Amenorrhea

[Amen-tampon](#)

Inhibition of gonadotropin releasing hormone causes decreased release of FSH and LH, causing decreased levels of sex hormones. This often presents with amenorrhea, which is lack of menstrual cycle in women of reproductive age.

Bitemporal Hemianopsia

[Bi-temple Tunnel-vision](#)

Bitemporal hemianopia is characterized by partial blindness where vision is missing in the outer half of the right and left visual field caused by compression of the optic chiasm. Patients commonly complain of decreased peripheral vision and difficulty seeing cars to the right and left during driving.

Treat with Dopamine

[Doberman](#)

Dopamine physiologically causes suppression of prolactin secretion and is used as treatment of prolactinomas.