

Pituitary apoplexy

Definition

Pituitary apoplexy is a rare, but serious condition of the pituitary gland.

Causes

The pituitary is a small gland at the base of the brain. The pituitary produces many of the hormones that control essential body processes.

Pituitary apoplexy can be caused by bleeding into the pituitary or by blocked blood flow to the pituitary. Apoplexy means bleeding into an organ or loss of blood flow to an organ.

Pituitary apoplexy is commonly caused by bleeding inside a noncancerous (benign) tumor of the pituitary. These tumors are very common and are often not diagnosed. The pituitary is damaged when the tumor suddenly enlarges. It either bleeds into the pituitary or blocks blood supply to the pituitary. The larger the tumor, the higher the risk for future pituitary apoplexy.

When pituitary bleeding occurs in a woman during or right after childbirth, it is called Sheehan syndrome. This is a very rare condition.

Risk factors for pituitary apoplexy in non-pregnant people without a tumor include:

- Bleeding disorders
- Diabetes
- Head injury
- Radiation to the pituitary gland
- Use of a breathing machine

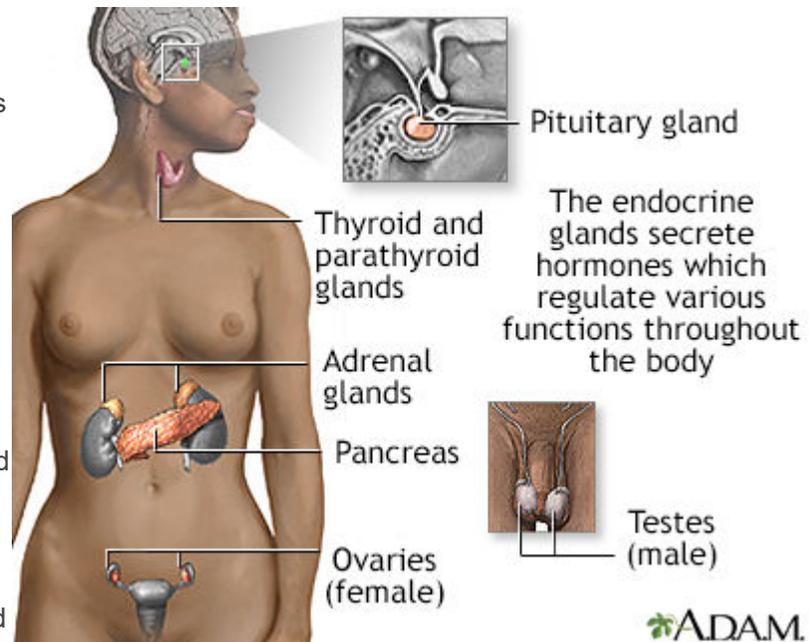
Pituitary apoplexy in these situations is very rare.

Symptoms

Pituitary apoplexy usually has a short period of symptoms (acute), which can be life threatening. Symptoms often include:

- Severe headache (worst of your life)
- Paralysis of the eye muscles, causing double vision (ophthalmoplegia) or problems opening an eyelid

Loss of peripheral vision or loss of all vision in one or both eyes



ADAM.

insufficiency

- Personality changes due to sudden narrowing of one of the arteries in the brain (anterior cerebral artery)

Less commonly, pituitary dysfunction may appear more slowly. In Sheehan syndrome, for example, the first symptom may be a failure to produce milk caused by a lack of the hormone prolactin.

Over time, problems with other pituitary hormones may develop, causing symptoms of the following conditions:

- Growth hormone deficiency
- Adrenal insufficiency (if not already present or treated)
- Hypogonadism (body's sex glands produce little or no hormones)
- Hypothyroidism (thyroid gland does not make enough thyroid hormone)

In rare cases, when the posterior (back part) of the pituitary is involved, symptoms may include:

- Failure of the uterus to contract to give birth to a baby (in women)
- Failure to produce breast milk (in women)
- Frequent urination and severe thirst (diabetes insipidus)

Exams and Tests

The health care provider will perform a physical exam and ask about your symptoms.

Tests that may be ordered include:

- Eye exams
- MRI or CT scan

Blood tests will be done to check levels of:

- ACTH (adrenocorticotropic hormone)
- Cortisol
- FSH (follicle-stimulating hormone)
- Growth hormone
- LH (luteinizing hormone)
- Prolactin
- TSH (thyroid-stimulating hormone)
- Insulin-like growth factor-1 (IGF-1)
- Sodium
- Osmolarity in blood and urine

Treatment

Acute apoplexy may require surgery to relieve pressure on the pituitary and improve vision symptoms. Severe cases need emergency surgery. If vision is not affected, surgery is often not necessary.

Immediate treatment with adrenal replacement hormones (glucocorticoids) may be needed. These hormones are often given through the vein (by IV). Other hormones may eventually be replaced.

- Sex hormones (estrogen/testosterone)
- Thyroid hormone
- Vasopressin (ADH)

Outlook (Prognosis)

Acute pituitary apoplexy can be life threatening. The outlook is good for people who have long-term (chronic) pituitary deficiency that is diagnosed and treated.

Possible Complications

Complications of untreated pituitary apoplexy can include:

- Adrenal crisis (condition that occurs when there is not enough cortisol, a hormone produced by the adrenal glands)
- Vision loss

If other missing hormones are not replaced, symptoms of hypothyroidism and hypogonadism may develop, including infertility.

When to Contact a Medical Professional

Call your provider if you have any symptoms of chronic pituitary insufficiency.

Go to the emergency room or call the local emergency number (such as 911) if you have symptoms of acute pituitary apoplexy, including:

- Eye muscle weakness or vision loss
- Sudden, severe headache
- Low blood pressure (which can cause fainting)
- Nausea
- Vomiting

If you develop these symptoms and you have already been diagnosed with a pituitary tumor, seek medical help right away.

Alternative Names

Pituitary infarction; Pituitary tumor apoplexy

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