

Neuroscience Unit

Information for patients with Pituitary Tumours

This information will provide a basis for your discussions with your doctors and nurses.

Pituitary tumours (adenomas)

Most pituitary tumours are non-cancerous (benign). They are often called adenomas and are usually slow growing. In spite of this similar treatments may be used.

The pituitary is a small oval shaped gland found at the base of the brain below the optic nerve. The gland secretes hormones that control other glands in the body.

It secretes a number of hormones such as:

- Growth Hormone which controls growth;
- Prolactin, stimulating milk production after childbirth;
- ACTH stimulates the adrenal glands to produce hormones;
- TSH stimulates the thyroid gland;
- FSH and LH influence the production of hormones from the ovaries and testes;



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- ADH controls the concentration of urine;
- Oxytocin stimulates the contraction of the womb in childbirth and the production of milk for breast feeding.

Symptoms

Most of the symptoms are a result of a hormone imbalance and can take a long time to develop.

Prolactin-secreting tumours are most common and result in an absence of monthly periods and production of breast milk. Men may experience impotence. Infertility can be common in both.

Tumours secreting the hormones FSH or LH are rare but would cause infertility.

Tumours that secrete an excess of growth hormones may cause a condition called gigantism or acromegaly, which is noticeable by the enlargement of the hands and feet.

Symptoms including weight gain increase in facial hair and depression can result from an overproduction of the hormone ACTH.

Sometimes a condition called diabetes insipidus is found, especially if there is disruption in the levels of the hormone ADH. The main symptoms are passing large amounts of urine and being continuously thirsty.

Pituitary adenomas can cause pressure particularly on the optic nerve, which leads to problems with vision and can cause headaches.

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Diagnosis

- Blood test: If excessive amounts of hormones are detected in the blood then further tests may be arranged;
- CT Brain scan (Computed Tomography);
- MRI Brain scan (Magnetic Resonance Imaging) People with pacemakers cannot have this test and those with any other metallic implant should inform the doctor well before the test. The scan will show the exact position of the tumour;
- Eye sight check with Visual Field charting.

The treatment of Pituitary tumours

Treatment is planned for each individual. There are several types of treatment including:

- Drugs: some drugs to shrink the tumour can be given, depending on the hormones that are being secreted. (For example, a prolactin secreting tumour can be treated with drugs called Bromocriptine or Cabergoline);
- Radiotherapy: this is the use of high energy X-rays to destroy tumour cells;
- Surgery: this is a common treatment for pituitary tumours. Generally the surgeon aims to remove most but not all of the pituitary gland. If the pituitary gland does not recover, then medication will need to be given to replace the missing hormones. This is not a major problem and is usually managed by an endocrinologist.

Patient Information

Results of Trans-sphenoidal Surgery

The results of surgery depend on the size of the tumour.

- If the tumour is 1cm in diameter then approximately 90% of patients are cured;
- If it is less than 2cms approximately 80% are cured;
- If it is more than 2cms then the cure rate by surgery is between 40% and 50%.

Further Information

Pituitary Foundation: 0845 450 0375

Alternatively, please contact Mr Shad's (Consultant) secretary on 024 7696 5208.

Information provided in this leaflet is intended to give you general information about your treatment. The specifics might vary to meet your individual medical needs, so it is important to always follow your consultant's advice.

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact 024 7696 5208 and we will do our best to meet your needs.

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