

Functionless Pituitary Tumours

Some pituitary tumours cause effects by producing too much of a particular pituitary hormone. Pituitary tumours which do not cause excessive production of any pituitary hormone are known as **Functionless (or Non-Functioning) Pituitary Tumours**.

Functionless pituitary tumours produce their effects by pressure on the normal pituitary gland and surrounding structures, causing symptoms mentioned on our general pituitary information sheet. Patients with this type of tumour most frequently present with:

- Symptoms due to pituitary deficiency (e.g. lack of periods in women)
- Loss of vision due to pressure on the nerves from the eyes
- Headaches

Treatment of Functionless Pituitary Tumours

- Except for a very few patients in whom the tumour is causing no symptoms at all (which are sometimes picked up by chance on X-rays or scans), the first treatment for these tumours is **transsphenoidal surgery**.
- After surgery, you will be reassessed and may, or may not, need some additional forms of hormone replacement therapy (although function may also improve after surgery).
- The scan of your pituitary will be repeated 3-6 months after the operation to see whether all the pituitary tumour has been completely removed - since it is not possible to be completely sure of this at the operation.
- These tumours (although benign) may regrow after surgery, often after several years (several studies suggest this may happen in 40% or more after 10 years and our own experience confirms this). If the scan shows no evidence of any residual tumour, then we may just arrange to keep you under occasional review in the clinic. We will repeat the scan about year later and every few years after that (with increasing times between the scans as the years go by).
- If the post-operative scan shows a small amount of tumour remaining, or if the tumour develops again on follow-up scans, then we are likely to recommend some additional treatment. Although there is no medical treatment which can get rid of this sort of pituitary tumour without the initial operation, there is now some evidence to suggest that a type of drug called a dopamine agonist (cabergoline or bromocriptine) may reduce the chance of regrowth if taken long term. We will therefore often discuss using this drug...
 - Studies suggest that if a dopamine agonist is started when residual tumour is detected on the post-op scan, then the rate of regrowth may be reduced to 10% or less. Waiting until regrowth is actually seen on subsequent scans before treatment may be somewhat less effective.
 - Cabergoline is given in a dose of 1 tablet (0.5mg) twice a week and is usually very well tolerated. There is a very rare risk of internal fibrosis (a form of internal scarring) described after long term use on high doses – we would monitor for this with blood tests but have never actually seen it occur in our patients despite treating a very large number of people over the years so the risk must be very low.
- If a large amount of tumour remains or growth continues then we will sometimes recommend **pituitary radiotherapy** to prevent further growth of the tumour. Sometimes a repeat operation might also be considered.
- If we can predict in advance when you need MRI scans and pituitary blood tests then we can often arrange to perform all of these at a 'single visit' clinic appointment, and/or for you to have the relevant blood tests before the clinic so that the results are available when we see you.

Whatever treatment you receive, it is most important that we keep you under long-term review in the clinic in order to detect any problems at the earliest stage.

After a year or two these appointments will only need to be once a year or even less often – but beware that if you miss an appointment then you might get 'lost to follow up'