

Information for patients with high prolactin levels

Why is my prolactin level high?

Prolactin is a hormone from the **pituitary gland**. There are a number of causes of a raised prolactin level including **pregnancy, medication** or an **underactive thyroid**; the stress of the **blood test** itself can increase prolactin levels. A pituitary tumour called a **prolactinoma** can also produce high levels of the pituitary hormone prolactin.

What are the effects of having a raised prolactin level?

- Osteoporosis (thin bones)
- Poor libido (sex drive)
- Difficulty conceiving (infertility)
- Irregular/no periods(women)
- Milk production from breasts (women)
- Problems with erections (men)



How is a prolactinoma diagnosed?

Prolactinomas are the most common type of functioning **pituitary tumour** and produce high levels of the pituitary hormone **prolactin**. Normally, prolactin is only high in women who are pregnant or breastfeeding. Women with prolactinomas often see a doctor earlier than men, since women are alerted by irregular or absent periods. Some patients with prolactinomas do not have any symptoms at all. Patients with large prolactinomas may have symptoms related to the size of the tumour eg visual disturbance or headache.

As there are a number of causes for a raised prolactin level, several prolactin measurements are made to confirm that prolactin is definitely high. Following confirmation that prolactin is high and not due to other causes, you will be offered a **pituitary MRI scan**.

What is the treatment for a prolactinoma?

The good news is that the majority of prolactinomas can be treated with **medication** and do not require any surgery. These medications are called **dopamine agonists**. In the UK, the most common dopamine agonist is called **cabergoline**. An alternative drug is **bromocriptine**. Cabergoline can often be taken once or twice a week whereas bromocriptine is taken every day.

Often, once a dopamine agonist is started, prolactin levels fall very quickly. Patients are followed up with a pituitary MRI after an interval on dopamine agonist treatment to ensure that the tumour has shrunk. In some patients, after a period of several years taking this medication, if the tumour has become smaller and prolactin levels are reduced, patients can have a trial off treatment to assess whether they need to take this medication in the longer term.

Are there any side-effects of dopamine agonists?

Cabergoline and bromocriptine are safe medications. Occasionally they can cause a change in your mood; if you notice a change in mood stop your medication and contact your doctor.

Although high doses of cabergoline (used in other medical problems) have been associated with stiffening of heart valves, there has been NO evidence of this side-effect in the low doses used for the treatment of prolactinomas, even when used for a long time.

Sometimes female patients need to take cabergoline or bromocriptine until they **conceive** and occasionally during **pregnancy**. It is very safe to take these medications prior to conception or in pregnancy.