

ELEVATED PROLACTIN

Prolactin is the hormone secreted from the pituitary gland that **stimulates milk production** from the breasts. It is measured during the investigation of some symptoms such as galactorrhea (breast milk production), headache, visual problems, irregular menstruation and infertility.

How It Works

Periodic elevations of Prolactin are very common and don't necessarily indicate any problems. Eating, stress, sexual excitement and certain drugs can temporarily elevate the Prolactin level. Usually the first response to an elevated Prolactin is to repeat the measurement to see if it is variable or consistent. Variable levels seldom require treatment.

Sustained levels of Prolactin may require treatment and will often be investigated with a Cat Scan or **MRI** of the pituitary region (head). The Cat scan may indicate a prolactin secreting tumor in the pituitary. If these are small (<1cm) they are called **microadenomas** and if greater than 1 cm they are termed **macroadenomas**. Cancer in the pituitary is exceedingly rare and most tumors represent local increases (hyperplasia) of secreting cells and respond to treatment well.

Elevated Prolactin and Infertility

Elevated prolactin causes anovulation by interfering with the normal release of follicle stimulating hormone (FSH) and luteinizing hormone (LH) from the pituitary. It can also interfere with the therapeutic effectiveness of Clomiphene Citrate which is a very common first therapy for infertility. If the prolactin level is found elevated in an **IUI** or **IVF cycle**, it may be treated depending on previous levels, the degree of elevation and the supervising physician's beliefs.

Treatment

Bromocriptine (Parlodel) is used for the treatment. Usually treatment is commenced with 1.25-2.5 mg once per day for at least one week after which time it may be increased. The main side effect of Bromocriptine is nausea (51%) which **lessens with time**. Other gastrointestinal (stomach and bowels) side effects may include vomiting (5%), abdominal cramps (7%), diarrhea (3%) and constipation (3%). These symptoms can be minimized by taking Bromocriptine with the **evening meal or with a snack at bedtime** and if it persists despite this taking it **vaginally**.



Postural hypotension (decreased blood pressure in the upright position) can lead to dizziness (16%), or fainting. These effects are usually limited to the first few days.

Headache (18%), fatigue (8%), lightheadedness (6%) and nasal congestion (5%) can also occur. These lessen with time. Nasal congestion, if persistent, can be treated symptomatically (nasal sprays or decongestants).

Elevated Prolactin, Bromocriptine and pregnancy

Once a pregnancy has occurred, Bromocriptine is stopped except in the case of macroadenomas.

Surgery

In some situations where the pituitary tumor does not respond to Bromocriptine, surgery may be necessary. This situation is extremely rare.

