Hyperprolactinemia

Prolactin is a hormone produced by the pituitary gland that stimulates the breast to produce milk. Inappropriate production of milk (not caused by pregnancy or lactation) is called galactorrhea. A high prolactin level is called hyperprolactinemia.

Increased prolactin production is usually caused by a prolactin secreting pituitary tumor (prolactinoma) or increased number of prolactin producing cells (hyperplasia). Pituitary tumors are benign, not malignant, tumors. Hypothyroidism can also increase prolactin levels and finally certain psychiatric medications can increase prolactin and cause galactorrhea.

As prolactin levels increase, the menstrual cycle changes due to a luteal phase insufficiency. If the prolactin level stays high, the menses change to infrequent periods and then no period. Without ovulation, pregnancy does not occur. Because of this, women with galactorrhea and no menstrual periods should have a prolactin blood test. If the value is greater than 40, a MRI exam of the base of the brain looking for a small tumor of the pituitary gland should be done. If a tumor is present, medication is usually given to prevent it from growing. Surgery is rarely indicated.

Treatment of hyperprolactemia results in reducing galactorrhea, resuming menstrual cycles, establishing normal estrogen production and treating pituitary tumors. Prolactin levels can be lowered using the medications Parlodel (Bromocryptine) or Dostinex (Cabergoline). If a small tumor is present, the use of these prolactin lowering drugs will decrease the size of the tumor. Normal ovulation will usually occur after the prolactin returns to normal. These drugs are usually discontinued when the woman becomes pregnant unless a large pituitary tumor is present.