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Vancouver Neuropituitary Program

UBC Division of Endocrinology & Metabolism

Vancouver Coastal Health

Prolactinoma & Pregnancy Informational Book

Name:

Also ask us for these materials:

- *Prolactinoma brochure*
- *Prolactinoma record book*
- *Adrenal insufficiency book*
- *Medication guidelines & coverage*
- *Prolactinoma lab tests*
- *Transsphenoidal Surgery*
- *Endocrine links & support groups*
- *Prolactinoma travel letter*

If found please return to:

Neuropituitary Clinics:
Room 467, Comox Bldg, St. Paul's Hospital,
Vancouver, BC
PH: (604) 806-9156
Fax: (604) 806-8594

Vancouver General Hospital (VGH)
Gordon and Leslie Diamond Health Care Centre
2775 Laurel Street, Vancouver, B.C
PH: 604.875.5929
Fax: 604.875.5925

Pituitary Nurse: Crystal Gagnon
Ph: 604-682-2344 ext. 62413
Pager: 604-252-4832
cgagnon2@providencehealth.bc.ca

Medications	*Dose*	*Start Date*	*Stop Date*
_____	____	_____	_____
_____	____	_____	_____
_____	____	_____	_____
_____	____	_____	_____
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References:

Canadian Medical Association Journal (CMAJ) (2003). Diagnosis and management of hyperprolactinemia, 169(6), 575-581.

www.endotext.com. Pituitary Disorders in Pregnancy, 2010.

both during your pregnancy and after you have stopped breast-feeding.

Be sure to record any medications you are taking before, during, and after pregnancy as well as the start and stop dates and any dosage changes.

Medications	***Dose***	***Start Date***	***Stop Date***
_____	____	_____	_____
_____	____	_____	_____
_____	____	_____	_____
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My Contacts:

Doctors: _____*Endocrinologist*

_____*Endocrinologist*

_____ *Neurosurgeon*

_____*Radiation Oncologist*

_____*Family Doctor*

_____ *Obstetrician*

_____

_____

Nurse(s): Crystal Gagnon
Ph: 604-682-2344 ext. 62413
Pager: 604-252-4832
cgagnon2@providencehealth.bc.ca
_____

_____

Clinic Coordinator: _____

Effects of Hyperprolactinemia on my body:

Both men and women may have infertility, decreased sex drive, and bone loss.

Women:
- Vaginal dryness & pain during intercourse
- Irregular periods
- Production of breast milk without being pregnant or nursing

Men:
- Erectile dysfunction
- Breast enlargement
- Decreased muscle mass and body hair

Other hormones: Sometimes with large prolactin producing tumours, after surgery, or with radiation treatment, the body becomes deficient in hormones such as growth hormone, cortisol, thyroid, testosterone or estradiol. These hormones must be monitored regularly and replaced with medications, especially during times of illness or stress (cortisol).

When the cause of hyperprolactinemia is hypothyroidism or other pituitary tumours such as a non-functioning tumour, a GH, or cortisol incidence of abortion, multiple pregnancy, or fetal abnormalities" (www.endotext.org).

Follow up while pregnant

Your doctor will continue to follow you closely during your pregnancy (at least every 2-3 months) for regular vision testing and to check for any symptoms of headaches during your pregnancy. This is to ensure that the pituitary tumour is not growing. The risk of tumour growth is higher in patients with a larger tumour prior to conception but this risk decreases with prior pituitary surgery or radiation treatment (www.endotext.org).

If the tumour does appear to be growing during pregnancy, there are a number of therapeutic options available depending on your stage of pregnancy and the severity of your symptoms. Your doctor will discuss these options with you.

After pregnancy

Can a pregnancy be beneficial for a prolactinoma?

Yes in some women prolactin can return to normal after a pregnancy, in some there is no change but a few have a worsening of the prolactin level. Once again medical therapy may be required and your specialist will follow you up to check all of this

prolactin levels and prolactin is essential to the production of milk.

Macroadenomas (>10mm)

However, in patients with pituitary tumours that are ***larger (>10mm)****, if the dopamine agonist is stopped, you will be monitored closely. You will probably be sent for visual field testing throughout your pregnancy to monitor for growth of the tumour. Or you may need to continue bromocriptine or cabergoline therapy while pregnant to prevent the pituitary tumour from growing during pregnancy. This is because the risk of tumour growth during pregnancy is much higher (between 15.5% and 41%) in these patients (www.endotext.org).*

Dopamine Agonists and the Fetus

Cabergoline has been utilized in the first trimester in more than 600 human pregnancies. To date, there is no evidence for increased risk of spontaneous abortion, congenital anomalies, multiple gestation, or premature delivery (www.endotext.org). In a study of 1400 women who were taking bromocriptine when they conceived, "there is no evidence of increased

producing tumour, monitoring and treatments of these disorders is essential.

Hyperprolactinemia and Pregnancy

Box 5: Management of hyperprolactinemia in pregnancy

- There is no evidence of increased teratogenicity associated with bromocriptine or cabergoline use during pregnancy[15,16]
- Similarly, there is no evidence of increased risk of abortion or multiple pregnancies with dopamine agonist use
- If the tumour size before pregnancy is < 10 mm, dopamine agonist therapy is stopped during pregnancy because the risk of tumour expansion is low[15]
- If the tumour size before pregnancy is ≥ 10 mm before pregnancy, bromocriptine use is advised during pregnancy to avoid significant tumour expansion[15]
- All patients should be evaluated every 2 months during pregnancy
- Formal visual field testing is indicated in patients with symptoms or a history of macroadenoma
- If visual field defects develop despite dopamine agonist treatment, early delivery or pituitary surgery should be considered[15]

Canadian Medical Association Journal (CMAJ) (2003). Diagnosis and management of hyperprolactinemia, 169(6), 575-581.

What happens during pregnancy?

The pituitary gland enlarges during pregnancy. High levels of estrogen and progesterone throughout pregnancy stimulate prolactin production (almost a 10-fold increase). Therefore it is imperative, before conception, that patients with prolactinomas work closely with their endocrinologist and obstetrician to normalize prolactin levels and restore a normal pattern of ovulation. This is typically successfully achieved with dopamine agonists (bromocriptine, cabergoline, or quinagolide) as the first treatment of choice (about 70-80% of women restore ovulatory menses on these medications) (www.endotext.org).

Pregnancy and Prolactinomas

During pregnancy, the pituitary increases in size and secretes much more prolactin. This puts patients with prolactinoma prior to pregnancy at risk for tumour enlargement if dopamine agonists are withdrawn during pregnancy.

However, most patients with prolactinomas have normal, uncomplicated pregnancies.

Microadenomas (<10mm)

*Immediately once pregnancy is confirmed, dopamine agonists such as bromocriptine, quinagolide, or cabergoline are stopped if the size of the pituitary tumour is **small (<10mm)**. This is because, with small pituitary tumours, the risk of tumour growth during pregnancy is relatively small (1.6-5.5%) (www.endotext.org). As long as there are no complications, dopamine agonists are stopped until the end of the breastfeeding period because these medications cause a reduction in*