

RAISED PROLACTIN

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Key Amendments

Date	Amendment	Approved by
26 th January 2019	Documents extended for 3 years	Mr Hughes
14 th December 2020	Documents approved for 3 years	Miss Blackwell
29 th December 2023	Document extended for 6 months whilst under review Owner updated	Alex Blackwell
20 th August 2024	Document extended for 6 months whilst under review	Alex Blackwell

Hyperprolactinaemia is an endocrine disorder caused by increased secretion from the pituitary gland, resulting in galactorrhoea, irregular menstruation and possible infertility. The incidence of raised prolactin in infertile but ovulatory women ranges from 3.8% to 11.5%.

Indications for Prolactin Determination in infertile patients

The treatment of hyperprolactinaemia in ovulatory patients has not shown to improve pregnancy rates. Estimation of prolactin levels should be reserved for women with symptoms of an ovulatory disorder including irregular periods, galactorrhoea or with a history of a pituitary tumour.

A single determination is usually sufficient to establish the diagnosis, but when in doubt, sampling can be repeated on a different day at 15-to 20-min intervals to account for possible prolactin pulsatility.

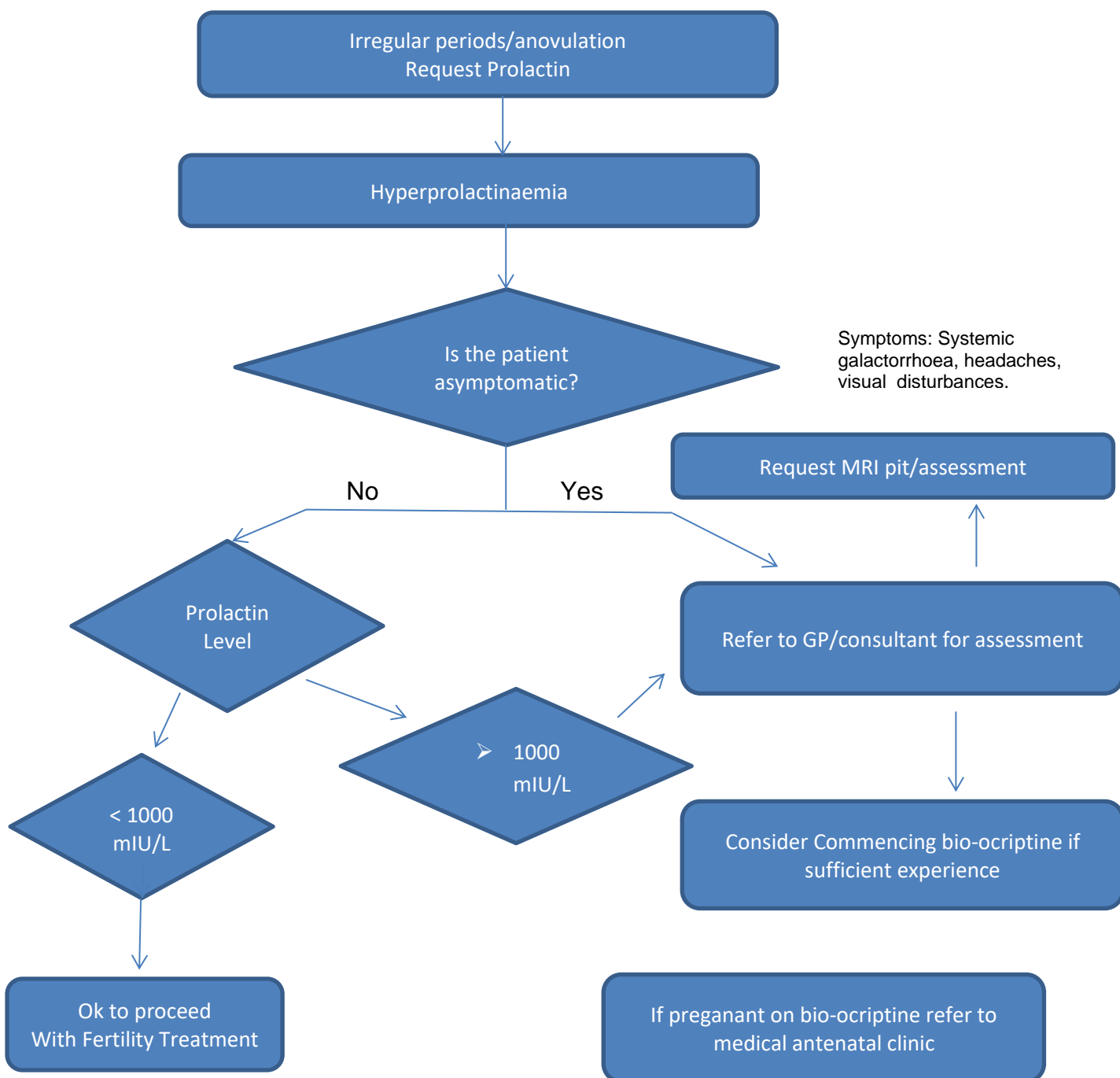
Management of incidental hyperprolactinemia

Very frequently patients come to the clinic having been investigated for prolactin as part of the infertility workup from their referring consultants. Mild elevations of prolactin above the upper limit is asymptomatic patients are very common and related to stress. Linked to determination in the vast majority of cases, moderate elevations of prolactin are more likely to be related with the presence of a prolactinoma whereas mild elevations correlate with stress-related results. Therefore it appears reasonable to set a cut-off value, above which, requires referral to an endocrinology consultant prior to starting IVF.

Faced with a raised
Prolactin level (see algorithm below):

- Discuss the findings with the patient and confirm the absence of symptoms related to Hyperprolactinaemia. If the patient is symptomatic, referral to GP/endocrinologist is needed prior to commencing fertility treatment. If asymptomatic, reassure the patient and follow the algorithm below.

- Investigate possible causes of mild hyperprolactinaemia such as concurrent medication especially neuroleptics and antidepressants. Renal insufficiency can increase the levels of prolactin due to reduction in the clearance.
- For asymptomatic patients with prolactin levels below 1000mIU/L it is reasonable to proceed directly with fertility treatment, since the likelihood of prolactinoma is very low. For levels greater than 1000 mIU/L the patient needs referral to their GP/endocrinology consultant for further investigations and assessment prior to start fertility treatment.



References:

- Diagnosis and treatment of hyperprolactinemia. An Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab 96: 273-288, 2011
- Fertility: assessment and treatment for people with fertility problems (update). National Collaborating Centre for Women's and Children's Health. National Institute for Health and Clinical excellence. May 2012.
- Gardner DK. Textbook of Assisted Reproductive Technologies. Laboratory and Clinical Perspectives. Third Edition. 2009. Informa Healthcare.