

Hyperprolactinaemia in young women: treatment and follow-up of the infertile patient

M Orosz (HU) [1], Z Szenasi (HU) [2], S Csehely (HU) [3], R Poka (HU) [4], A Jakab (HU) [5], T Deli (HU) [6]

Context: Hyperprolactinemia is the presence of abnormally elevated levels of prolactin in blood. It is usually related to pituitary lactotrop adenomas or it can be the adverse effect of many antipsychotic agents. Women suffering from hyperprolactinemia have a higher chance of infertility as a result of irregular menstrual cycle and chronic anovulation.

Objective: The aim of this study was to examine 131 hyperprolactinemic patients, with particular regard to analysing data related to hyperprolactinaemia and associated diseases as well as the obstetrical outcome and treatment.

Methods and patients: Retrospective analysis of computer database containing records of patients, who were treated at the Gynecologic Endocrinology Outpatient Clinic at the Department of Obstetrics and Gynecology, Faculty of Medicine, University of Debrecen between 2015.01.01 and 2016.10.01.

Interventions: Data of 131 women suffering from hyperprolactinaemia were analysed.

Main outcome measures: Age, body mass index(BMI), obstetrical outcome, associated diseases, symptoms were examined as clinical factors. Laboratory measures were prolactin, TSH. Micro/macroprolactinoma and empty sella were diagnosed with MRI.

Results:

According to lab tests 93% of the patients suffered from real hyperprolactinaemia and we found macroprolactinaemia in 7% of the patients. The first-line therapy for patients with hyperprolactinaemia is pharmacological intervention with a dopamine agonist. 42% of the women were treated with Bromocriptin and 15% of the patients were treated with quinagolide.

In 12% of the cases, we had to switch the therapy from Bromocriptin to Norprolac because of the side effects (8%) and resistance (4%) to bromocriptine (some patients appear to tolerate quinagolide better than bromocriptine). MRI is a sensitive tool for the investigation of pituitary adenomas. In our study with MRI we found microadenomas (smaller than 10 mm) in 89% of the cases, macroadenomas in 2% and empty sella in 9% of the patients.

We found drug induced hyperprolactinaemia in 12% of the cases. Subclinical or manifest hypothyroidism was proven in 10% of the cases. Hyperprolactinaemia remained idiopathic in 35% of the cases. 18% of patients suffered from infertility.

Conclusions: The goals of therapy are to normalize prolactin, reverse hypogonadism and restore fertility. In our Clinic the most common treatment approach is to give dopamine receptor agonists, bromocriptine and quinagolide.

