УДК [61+615.1] (043.2)
ББК 5+52.81
А 43
ISBN 978-985-21-1864-4

Shehara Guruge, Anshali Ratnasekera

EXPERIENCE IN MANAGEMENT OF A PATIENT WITH SEVERE HYPERPROLACTINEMIA: CASE REPORT

Tutor: PhD, associate professor Dydyshka Yu.V.
Department of Endocrinology
Belarusian State Medical University, Minsk

Introduction. Hyperprolactinemia, characterized by elevated serum prolactin levels, is a common endocrine disorder that can lead to significant clinical manifestations, including galactorrhoea, amenorrhea, and infertility. It can be attributed to a variety of conditions, including prolactin-secreting pituitary adenomas, hypothyroidism, or certain drugs. Severe hyperprolactinemia is frequently managed using a multidisciplinary strategy which involves pharmaceutical treatment, prolactin level monitoring, and, in some cases, surgical intervention.

Aim: of this case report provides a detailed account of a patient with severe hyperprolactinemia, highlighting the problems faced during diagnosis and management, as well as the therapeutic options used to attain satisfactory outcomes. This data can provide useful insights into the complexity of treating hyperprolactinemia and the value of personalized patient care in endocrinology.

Material and methods. Articles from PubMed and Google Scholar databases were closely studied, analysed and reviewed attentively to summarize the subject of the study, where a specific keyword “hyperprolactinemia” was used from years 2014 to 2024 to deduce their significant correlation for the aim of the study. A case-report study was carried out at the Republican Endocrinology Centre, with a focus on the clinical case of the 38-year-old female patient who was diagnosed with severe hyperprolactinemia caused by a pituitary macroadenoma. The observation period was from the beginning of 2023 to the present, she is currently continuing treatment.

Results and their diskussion. Patient had not experienced menstruation since January 2023, until in September 2023, she reported a minimal menstrual period. She later developed to have more significant cycles from October 2023 till January 2024, hence showing a gradual restoration of her hormonal equilibrium. These significant improvements were noted after commencing cabergoline medicine. Before the appointment of cabergoline, prolactin was extremely high, about 120,000 ng/mL Hormonal assays performed throughout this period revealed fluctuating prolactin levels, beginning at 1132 ng/mL in May 2023 while taking cabergoline 0.5 mg twice a week and peaking alarmingly at 2576 ng/mL by November 2023, necessitating changes to her treatment regimen. To further regulate her hyperprolactinemia, the cabergoline dosage was increased, first to three times a week, then to four, and then to 0.5 mg five times a week by January 2024, resulting in a significant decrease in prolactin to 1081 ng/mL. This decline in prolactin levels coincided with improvements in her menstrual periods, indicating a beneficial response to the enhanced treatment. A follow-up MRI on September 17, 2023, revealed a reduction in the size of the pituitary macroadenoma, which had previously been measured at 22x20x19 mm, showing that the tumour was well managed without compressing the optic chiasm. These data show the efficacy of cabergoline as a first-line therapy preference for severe hyperprolactinemia and the relevance of customized treatment regimens in achieving favourable outcomes.

Conclusion. The use of cabergoline is an effective and safe treatment for pituitary macroadenomas in the first step. This case report demonstrates the efficacy of cabergoline as a first-line treatment for severe hyperprolactinemia, with considerable improvements in menstrual function and a significant decrease in prolactin levels. The targeted approach to dosage modifications and regular monitoring resulted in positive outcomes, highlighting the relevance of personalized treatment options in managing this endocrine condition.