

CHANGES OF PROLACTINOMAS DURING PREGNANCY AND LACTATION

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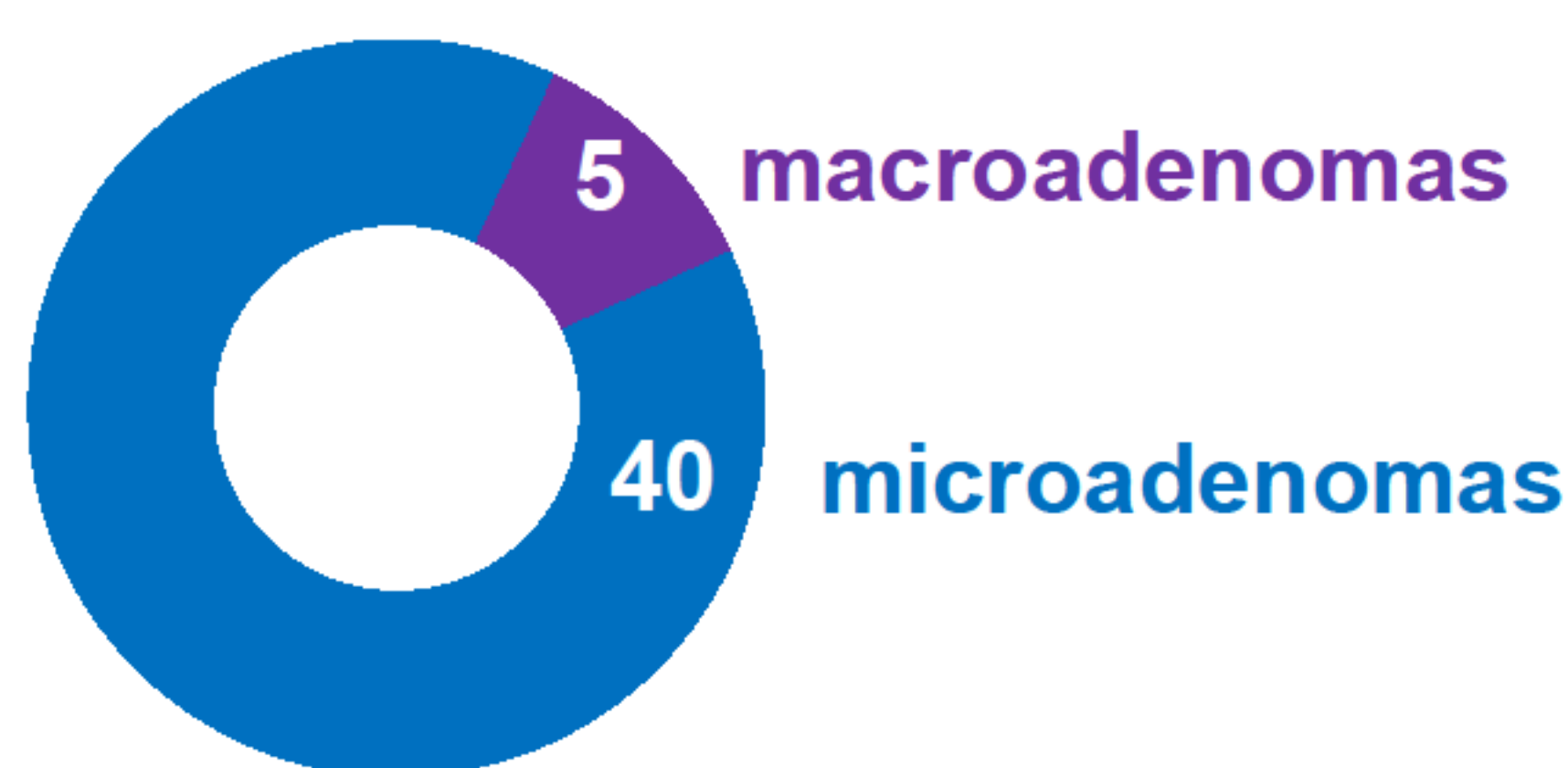
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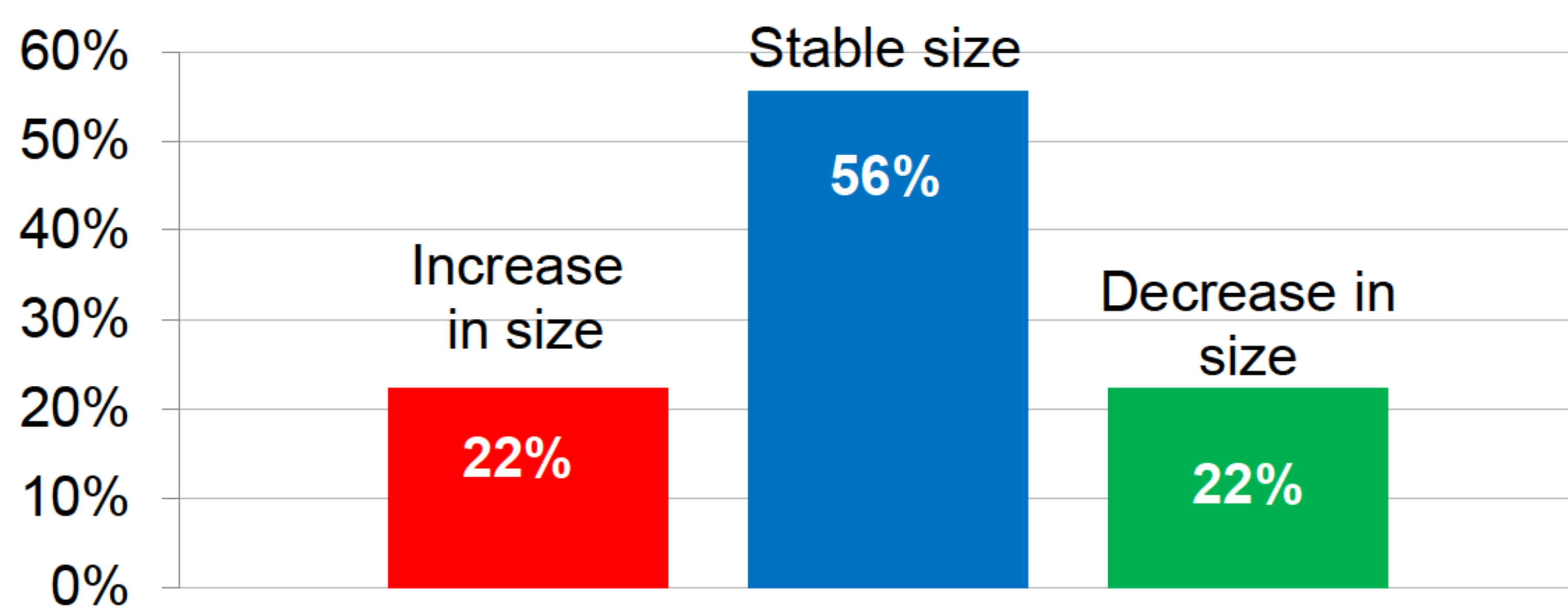
OBJECTIVES

To assess the size changers of prolactinomas after pregnancy and lactation.

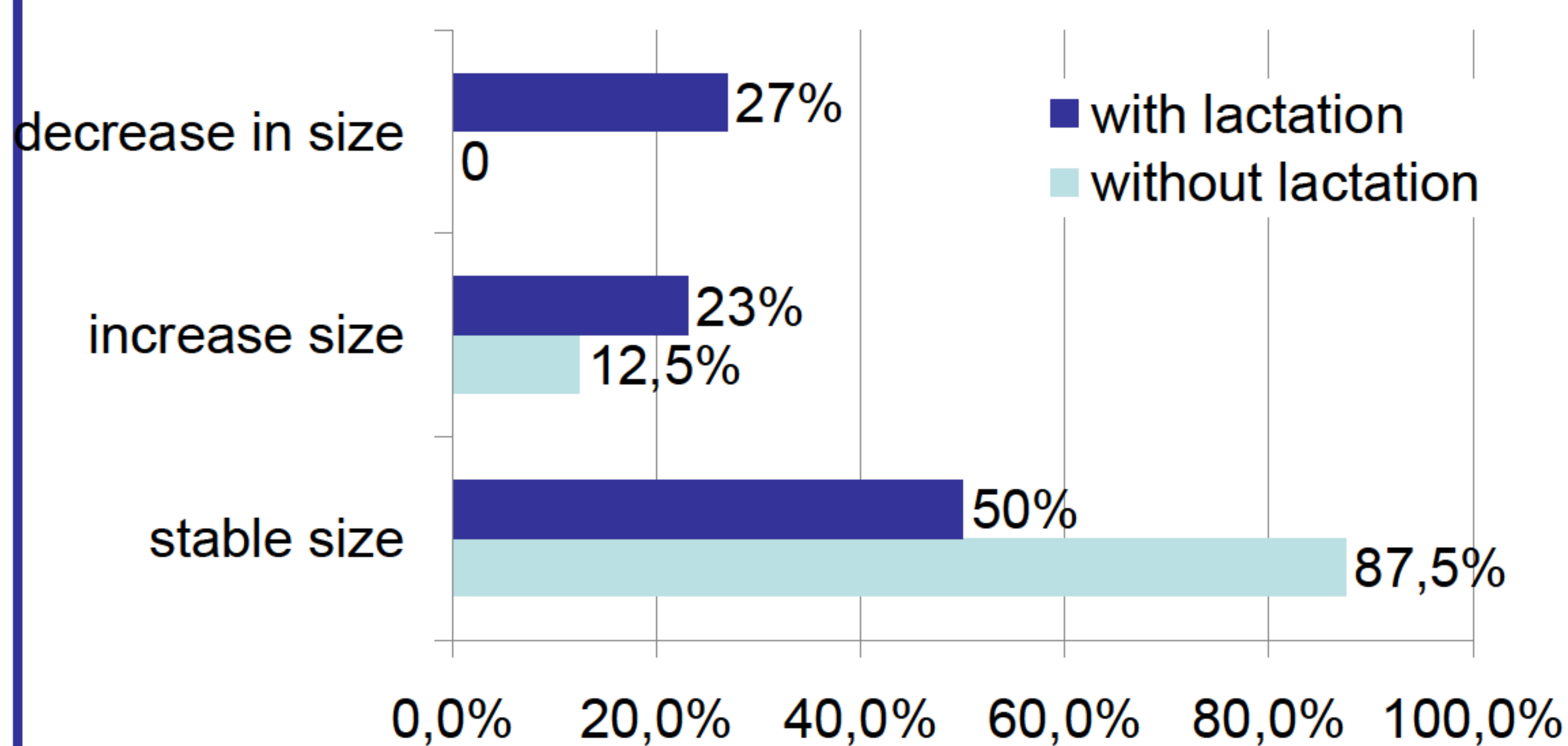
Picture 1. Number of patients with macro- and microadenomas



Picture 2. Changers of adenomas during pregnancy and lactation



Picture 3. Changers of adenomas while lactation



METHODS

We have analyzed the Russian Register of tumors of the hypothalamic-pituitary region and conducted additional surveys of patients with prolactinomas who had pregnancy. We obtained data from 33 patients with prolactinomas who had 45 pregnancies and MRI studies prior and during/after pregnancy and lactation. Five patients had macroadenomas and 40 – microadenomas (Picture 1).

RESULTS

In 55.6% (25/45) of prolactinomas did not change after the pregnancy (including in 3 patients with macroadenomas). In 22,2% (10/45) they increased in size, including two macroadenomas. Growth of pituitary adenomas in two cases was accompanied by clinical symptomatology (visual field loss, complete loss of vision in one eye). 22.2% (10/45) of patients experience the decreased in size of prolactinomas, which was observed only with microadenomas, and in three cases complete involution was noted. Information on lactation period and MRI evaluation was available for 34 pregnancies in patients with prolactinomas. According to the recommendations of doctors lactation was stopped immediately after birth with the help of dopamine agonists in 23.5% (8/34) of cases. In 87.5% (7/8) of these patients MRI did not show any changes from baseline and in 1 patient (12.5%) microadenoma had increased in size to macroadenoma without clinical significance. 26/34 patients nursed their children on average of 12 (\pm 8) months and often stopped lactation due to doctor's recommendations with the help of dopamine agonists. In these patients according to MRI no changes were found in the pituitary adenoma size in 50.0% (13/26) cases, adenoma decreased in 26.9% (7/26) and increased in 23.1% (6/26). The patients with the increased size of prolactinoma during lactation had the shortest duration of lactation - 5 (\pm 2) months.

CONCLUSIONS

While the majority of pregnancies and lactation in patients with prolactinomas is not associated with adverse complications from the adenoma site, there is still a substantial risk in 1 in 5 women to experience tumor growth, though mostly subclinical, which raises the need of better prediction of such unfavorable outcomes.

