

# PROSPECTIVE MONITORING OF THE PITUITARY ADENOMAS ASSOCIATED WITH HYPERPROLACTINEMIA

LUKYANENOK P.I., M.D., Prof., Academician of RAE

«Research Institute for Cardiology», RUSSIA, Tomsk, Laboratory of MRI

**Introduction:** Among all the most common pituitary tumors are prolactinomas, they accounted for 29% of all pituitary tumors, and this percentage increases to 47% if not pure prolactinoma and their mixed. If from the point of view of a specialist MRI we haven't problems in the diagnosis of pituitary adenomas, from the perspective of dynamic monitoring of patients at stages of therapy, there are certain difficulties due to the lack of monitoring standards, multiplicity of conducting MRI of the pituitary gland in the treatment, and this applies to both conservative and surgical phase.

**The aim** is to trace the changes in the stages of prolactinomas therapy and practice the multiplicity of conducting MRI on stages of surgical and therapeutic treatment in the prospective study.

**Material and methods:** for almost 20 years there has been a group of patients (n = 1200, m-84; w-1116, ranging in age from 6 to 65 years). The study was conducted on low field magnetic resonance system (0,23T) and superconducting MRI using standard sequences and used copyright protocols.

**Results and discussion:** the author in great material was able to show the multiplicity of conducting MRI with adenomas of varying size, track the dynamics of changes of pituitary adenomas and prove the possibility of recourse to signs in the hyperprolactinemia stages of macroadenomas therapy of prolactin inhibitors. The duration of monitoring allowed the author to generate a new approach to classification of adenomas with the inclusion of initial changes in the pituitary gland, identified them as adenopatia. The work is supplied with high-quality graphics and histologically verified clinical materials, allowing her to consider this as a teaching aid, which can be successfully used in professions in radiology, radiation therapy, Gynecology, Endocrinology, eye diseases, Neurology, Oncology, neurosurgery. The cited author of clinical samples and duration observations confirm the fact that patients management prolactinomas conservative way are completely justified. Extremely important is described by the author of the discovery of the syndrome of sellar hypertension, mechanisms of its development and ways of intravital diagnosis with MRI. The above allows us to consider and recommend its use monograph as a handbook for medical professions listed above, as well as in the pedagogical process of medical students, doctors, improve qualifications in postgraduate training. Deserves the description approaches such patients, the survey author's methods of calculating adenomas on

the stages of therapy, development options and the pituitary Sella turcica, contrasting approaches.

**Findings and conclusions:** Prospective follow-up for patients with hyperprolactinemia, allowed to make a hypothesis about the existence of "co-factor" contributing to the pineal gland as the depress action on the pituitary gland, and in certain situations, the stimulating effect on the pituitary gland and the development of adenomas. Regress of clinical symptoms is especially pronounced when the pituitary microadenoma associated thyroid dysfunction, taking contraceptives, as well as in microprolactinoma, adenomas, the dimensions of which do not exceed 10 mm. It is, on the basis of these considerations, dynamic MRI, pathological changes in the pituitary gland, the author offers classified as adenopatia (small hypointensive on T1 enable up to 1-2 mm in the front lobe of the pituitary gland 1 to 4-th, not inclined to merge), microadenomas - sizes 4-6 mm, adenoma (sizes 6-10 mm), and where macroadenoma dimensions adenomas were more than 10 mm. The majority of prolactin requires conservative tactics of treatment for endocrinologist, but MRI approach-monitoring must be different.

So when pituitary changes caused by adenopatia enough observations 1-2 times per year; in adenomas, which size is 4-6 mm- 1 in 1.5 years; when prolactinomas size 6-10 mm-1 once a year. It should be noted that in the process of dynamic monitoring of patients with pituitary adenomas with hyperprolactinemia, the translation should be sought from adenoma to adenopatia. While downsizing inclusions to 2-3 mm, must be implemented in the future, the hormonal control of times in 3-6 months. In this case, there is no need to understand some endocrinologists in carrying out magnetic resonance imaging at the stages of treatment bromocriptine or dostinex every six months. Best we can consider, when control of the situation is conducted in the Commonwealth physician-Endocrinologist and specialist of MRI.

The results of this work are published in the form of a monograph. The book contains 94 references, 78 figures and 294 pages.

The monograph will be accepted as collective and individual applications by E-mail: [Lukans@yandex.ru](mailto:Lukans@yandex.ru)