

EVALUATION OF THE RESULTS OF PARATHYROIDECTOMY IN CHILDREN WITH PRIMARY HYPERPARATHYROIDISM IN THE LONG TERM AFTER SURGERY

Nazira Rikhsieva

Assistant at the Department of Endocrinology with Pediatric Endocrinology,

Tashkent Pediatric Medical Institute

Uzbekistan 100140, Tashkent, Yunusabad district, Bogishamol str. 223

rihsievan@mail.ru, tel: +998998753909

ABSTRACT: Primary hyperparathyroidism (PHPT) is a chronic endocrine disease characterized by excessive secretion of parathyroid hormone (PTH). Excessive secretion of PTH can be caused by adenoma, hyperplasia, or carcinoma of the parathyroid glands (PTG). The prevalence of PHPT increases with age, but the disease can affect people of all ages, including children. According to medical statistics, in families where there are patients with hyperparathyroidism, in 30% of cases, the disease manifests itself in children. It is generally accepted that surgery is the treatment of choice for the treatment of PHPT, which allows recovery in 92% of cases. Despite the undoubted successes of domestic and foreign scientists in the surgery of PHPT, associated with the study of the pathogenesis of this disease, the use of modern diagnostic methods and the improvement of surgical techniques, the results of surgical treatment are often unsatisfactory. In particular, in operated children there is no reliable information about the condition of patients in the long term after the intervention, the criteria for the effectiveness of surgical treatment of PHPT are still not clearly defined, as well as the relapse of primary hyperparathyroidism are quite formidable and can cause suffering to the child.

KEYWORDS: primary hyperparathyroidism; children; surgery; long-term results; parathyroidectomy;

OBJECTIVE: To evaluate the long-term results of parathyroidectomy in children with primary hyperparathyroidism.

MATERIALS AND RESEARCH METHODS. In order to study the long-term results of surgical treatment of children with PHPT, 92 patients were examined who were operated on for PHPT in the Department of Endocrine Surgery of the Center of Endocrinology in the period from 2000 to

2020. By the time of the examination, the terms of the postoperative period varied from 5 to 20 years. The patient group included 52 boys and 40 girls diagnosed with PHPT. Of these: bone form PHPT - 31 people, renal form - 38 people, mixed form - 23 people. The study consisted of the study of case histories, results of examination methods, protocols of operations, histological reports of 92 patients. The age of the operated patients is from 4 to 15 years. Evaluation of the results was carried out on the basis of a set of data from clinical, laboratory, and X-ray studies.

RESULTS OF THE STUDY: Dynamic observation of patients with PGPT (for 5-20 years) showed that after surgery the level of Ca and P in the blood corresponds to the control values. There was a tendency to an increase in the average daily urinary excretion of inorganic phosphorus and ALP activity. The frequency of recurrence of stone formation in the kidneys decreased by more than two times, and the frequency of attacks of renal colic - two times. Chronic renal failure did not progress. Relapse of stone formation after parathyroidectomy was recorded in 2 children in the long-term (5-10 years) follow-up period. In addition, a significant increase in the mineral density of the compact and cancellous bone was observed. After 10 years, complete restoration of the structure of the tibia, clavicle, ulna and lower jaw was noted. The frequency of almost all leading symptoms decreased significantly: pain in bones and joints, muscle weakness, stiffness. In the group of patients with a mixed form of hyperparathyroidism, the concentration of parathyroid hormone decreased to normal values 5 years after surgery.

CONCLUSIONS: Based on a thorough study of the long-term results of parathyroidectomy in children, it has been established that the overwhelming majority of patients have a positive dynamics of clinical manifestations and normalization of biochemical parameters.

The criteria for the effectiveness of surgical treatment are: a decrease in the levels of calcium and PTH in the blood.

The data obtained indicate the restoration of calcium-phosphorus metabolism and bone tissue in the majority of operated children with primary hyperparathyroidism in the long term after parathyroidectomy. In almost all patients, the results of the operation were good and stable over the years.

REFERENCES

1. Fakhrutdinova L.M. Pervichnyy giperparatireoz: sovremennyye predstavleniya i klinicheskoye nablyudeniye. Arkhiv" vnutrenney meditsiny. 2020; 10(2): 94-101. DOI: 10.20514/2226-6704-2020-10- 2-94-101.
2. Mokrysheva N.G., Yermkina A.K., Slashchuk K.YU. i dr. Atipicheskaya adenoma okoloshchitovidnoy zhelezy s klinicheskiy agressivnyy techeniyem pervichnogo giperparatireoza: nablyudeniye iz praktiki. Endokrinnaya khirurgiya. 2018; 12 (1): 55–63. doi: 10.14341/serg9587.
3. Nazira Rikhsieva, & Saidganikhodja Ismailov. (2021). Comparative analysis of the quality of life of children with primary hyperparathyroidosis during the long periods after parathyroidectomy. <https://doi.org/10.5281/zenodo.5594011>
4. Yanevskaya L.G., Karonova T.L., Sleptsov I.V. i dr. Pervichnyy giperparatireoz: klinicheskiye formy i ikh osobennosti. Rezul'taty retrospektivnogo issledovaniya. Klinicheskaya i eksperimental'naya tireodologiya. 2019; 15 (1): 19–29