

FEATURES OF OPERATIVE INTERVENTION IN PATIENTS WITH RETROSTERNAL LOCATED DISEASES OF THYROID GLAND

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Relevance. Among the widespread thyroid pathologies, diseases of the retrosternally located thyroid gland occur in 5 - 6% of cases. The only treatment method for patients in this category is surgery.

During surgical treatment of patients with pathology of the thyroid gland located retrosternally, the number of intra and postoperative complications can reach up to 10%. In this case, the main causes of complications can be both traditional difficulties characteristic of all operations on the thyroid gland, and features associated with the localization of the retrosternal component. It should be noted that surgical complications during these operations from the cervical approach often result from attempts to blindly “hustle” the lower thyroid pole. In addition, a transition to more traumatic interventions is often required, namely sternotomy or thoracotomy. The ambiguity of surgical intervention techniques in patients with various diseases of the retrosternal thyroid gland makes it necessary to search for new ways to prevent specific intra- and postoperative complications.

Goal: Improving the results of surgical intervention in patients with diseases of the retrosternal thyroid gland.

Materials and methods: We analyzed the results of surgical treatment of 41 patients with a retrosternally located thyroid gland. Among those operated on, there were 4 (10%) patients with nodular nontoxic goiter, 17 (42.5%) with multinodular nontoxic goiter, 2 (5%) with recurrent multinodular goiter, 2 (4%) with diffuse toxic goiter, 5 (10%) – with autoimmune thyroiditis, 8 (20%) – with thyroid adenoma and 2 (5%) patients with thyroid carcinoma.

When examining patients, we attached particular importance to imaging research methods, such as ultrasound, computed tomography and magnetic resonance imaging of the neck and mediastinum. The information obtained about the topographical and anatomical features of the boundaries of the lower poles of the gland was of great importance when planning the tactics of surgical intervention.

During the surgical treatment of patients, an improved technique of surgical intervention from the cervical approach was used, observing a certain stage in the mobilization of the thyroid gland. Access to the thyroid gland was made through a collar incision. The corners of the surgical wound were located at the level of the medial edges of the sternocleidomastoid muscles. If necessary, for a better overview and convenient manipulation in a small incision, the preglottic muscles were moved back using a Farabev hook. The size, consistency, structural and topographic-anatomical features of the thyroid gland were assessed. The essence of the technique is to ensure maximum mobility of the removed thyroid lobe with the retrosternal component when mobilizing it from top to bottom.

The possibility of atraumatic movement of the lower pole in the bed of the thyroid gland is determined by the fact that etiologically the retrosternal localization of thyroid tissue is an acquired pathology. An important condition for this is, first of all, complete mobilization of the upper pole and middle part of the thyroid gland. With this method, to facilitate the mobilization

of the retrosternal part of the thyroid gland, we began interventions by crossing the isthmus in the longitudinal direction after separating it from the trachea using a blunt method. The next step was to mobilize the upper pole of the gland with isolation and division after ligation of the upper thyroid arteries, veins and lymphatic vessels. This sequence of techniques made it possible to achieve maximum mobility of the removed lobe of the thyroid gland to remove its retrosternal part with the least trauma and prevention of intraoperative complications. The intervention on the thyroid gland was completed with a thorough revision of its bed and surrounding structures - the integrity of the great vessels of the neck, recurrent laryngeal nerves, parathyroid glands, trachea, cricothyroid muscle. Particular attention was paid to the retrosternal part of the wound bottom. To prevent neck deformation in the surgical area and the development of fusions of the trachea with the platysma and subcutaneous tissue, careful restoration of the muscular-fascial frame was performed. When closing the wound, a rubber strip was left for suction. On days 2-3 after surgery, patients had their blood levels of Ca, P, and thyroid hormones determined and a laryngoscopic examination of the larynx was performed.

Results: Analysis of the results of treatment of this group of patients showed that when using the proposed intervention, there was no need to expand the surgical approach. In addition, clinical laryngoscopic signs of disorders of the larynx and oropharynx, persistent hypoparathyroidism, bleeding and inflammatory processes in the wound were not recorded. In the postoperative period, we identified 1 (2.5%) case of transient hypoparathyroidism, which was easily relieved by conservative measures.

Conclusions: Thus, to improve the results of surgical intervention in patients with diseases of the retrosternally located thyroid gland from the cervical approach, it is necessary to adhere to a certain and clear stage when mobilizing the thyroid lobe with separate ligation of the branches of the lower and upper thyroid vessels, visualization and isolation of the parathyroid glands, recurrent and, if necessary, superior laryngeal nerve. It was the above circumstances that made it possible to achieve a reduction in the number of intra and postoperative complications with the required volume of intervention, and thereby made it possible to improve the results of surgical treatment of the observed patients.