ULTRASONOGRAPHY IN THYROID PATHOLOGY DIAGNOSTICS

Babuci Angela[1], Zorina Zinovia[1], Postu Nicoleta[1], Lehtman Sofia[1], Botnari Tatiana[1], Botnaru Doina[1], Ostahi Nadia[1]
[1]Department of Anatomy and Clinical Anatomy, *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova.

Background. In recent decades, a rejuvenation of the pathology of the thyroid gland has been observed, including thyroid tumors. The pathology of the thyroid gland has been increasing lately in our country, and one of the most valuable, safety, cost-efficient and optimal imaging methods used in thyroid gland examination is the ultrasonography.
Material and Methods. Our study was conducted on 92 patients (16 males and 76 females), aged between 1-72 years, with various functional problems of the thyroid gland, which were examined by ultrasonography in the Republican Diagnostic Center, during the period May 2021-January 2022.
Results. A series of thyroid diseases, among which the thyroid nodules (44.6%), the colloid cysts (7.6%), the autoimmune pathology (3.2%), and others (4.3%) were revealed. Out of the total number of patients diagnosed with thyroid nodules, 22% were males and 78% were females. Unilateral thyroid nodules were marked out in 65.9% of patients, with a male/female ratio of 18.5%/81.5%. Nodules of the right thyroid lobe were determined in 51.9%, with a male/female ratio of 28.6%/71.4% and nodules of the left thyroid lobe were determined in 48.1%, with a male/female ratio of 7.7%/92.3%. Bilateral nodules were present in 34.1% with a male/female ratio of 21.4%/78.6%. Multiple unilateral nodules were marked out in 19.5%. The morphometric parameters of the anteroposterior dimension of the right lobe (RL) of the thyroid gland varied between 1.03-2.34 cm, with a mean value of 1.66±0.27 cm, and that of the left lobe (LL) varied between 0.87-4.03 cm, with a mean of 1.66±0.37 cm. The transverse dimension of the RL were 0.68-2.03 cm, with a mean of 1.45±0.31 cm, and the transverse dimension of the LL were 0.83-8.6 cm, with a mean of 1.51±0.80 cm. The longitudinal dimension of the RL was 1.60-4.99 cm, with a mean value of 3.69±0.49 cm, and that of the LL was 1.64-4.96 cm, with a mean of 3.59±0.55 cm. The thyroid isthmus values varied between 1.5-6.6 mm, with a mean of 3.03±0.68 mm.
Conclusions. Both benign and malignant thyroid gland diseases had a higher rate in females, compared to males. Almost in a half of the examined patients were established thyroid nodules, with a twice-higher prevalence of the unilateral nodules and a slight prevalence of the nodules of the right thyroid lobe.
Keywords: thyroid gland, thyroid nodules, ultrasonography, morphometry.