

ULTRASONOGRAPHIC AND SCINTIGRAPHIC PARAMETERS OF MALIGNANCY OF THE DOMINANT THYROID NODULE

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An adequate approach to diagnosis and treatment of the dominant thyroid nodule is a matter of debate. The aim of the study is to determinate the most significant ultrasound and scintigraphic parameters of malignancy in dominant thyroid nodules.

The study involved 95 patients treated surgically for polynodous goiter with a dominant nodule for whom ultrasonographic and scintigraphic diagnosis was made prior to surgery. Echosonographic and scintigraphic findings were compared and analyzed against the operative and histopathologic findings of the dominant nodule.

Our male examinees were 59.4 ± 11.66 years, and female examinees 53.02 ± 12.78 old on the average. Of the total number of examinees, there were 74 with benign and 21 with malignant changes. Considering the ultrasound and scintigraphy parameters of malignancies, the following could be singled out as statistically significant: non-sharply delineated nodule change (OR=0.765; 95% CI=0.555-0.985); hypoechogenicity (OR=2.152; 95% CI=1.111-2.456); avascular nodule (OR=2.156; 95% CI=1.111-4.589); and hypofunctional nodule (OR=2.154; 95% CI=1.111-3.589). The sensitivity and specificity of ultrasound in dominant nodule detection were 80% and 90%, respectively, while for scintigraphy the percentages were 55% and 60%.

The most important diagnostic parameters of a malignancy of the dominant thyroid nodule are non-sharp delineation of the change, hypoechogenicity and nodule avascularization. Ultrasound has higher sensitivity and specificity than scintigraphy in the diagnosis of malignant dominant thyroid nodules. *Acta Medica Medianae* 2016;55(1):14-20.

Key words: thyroid nodule, parameters of malignancy, ultrasonographic