ULTRASONOGRAPHICAL AND CYTOLOGICAL FEATURES OF EXOPHYTIC THYROID NODULES: DO EXOPHYTIC NODULES PRETEND TO BE MALIGNANT?

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Aim
➢ Exophytic nodule refers to a nodule that sticks out of the normal thyroid boundary/outline. Other definition is a nodule with an acute angle between the lesion and adjacent thyroid capsule. Exophytic configuration is not known risk factor for thyroid cancer. We aimed to compare ultrasonographical features and cytopathologic results of exophytic and non-exophytic thyroid nodules.

Material and Method
➢ Forty-four exophytic and 34 non-exophytic thyroid nodules in which fine needle aspiration biopsy was indicated throughout 3 months were evaluated prospectively. Mean nodule size was similar in two groups (18.83±8.71 mm and 15.28±7.57 mm, p=0.173). The ratio of presence of peripheral hypoechoic halo and marginal irregularity was also similar in both group (p=0.512 and p=0.153, respectively). Microcalciﬁcation was present in 21.4% and 29.4% of exophytic and non-exophytic nodules, respectively (p=0.424). Macrocalciﬁcation was detected in 4.5% of exophytic and 11.8% of non-exophytic nodules (p=0.111). 47.6% of exophytic nodules was hypoechoic and 52.4% was isoechoic. 47.1% of non-exophytic nodules was hypoechoic and 52.9% was isoechoic. Color ﬂow doppler pattern was defined as non-vascular, peripheral, central, or of mixed type and was similar in both groups (p=0.138). Cytopathologic results of exophytic nodules were 75% benign, 4.3% follicular lesion or atypia with undetermined significance, 2.3% suspicious for malignancy, 2.3% malign, and 15.9% non-diagnostic. In non-exophytic group, 79.4% was benign and 20.6% was non-diagnostic (p=0.497).

Conclusion
➢ Exophytic configuration of thyroid nodules was rarely investigated as a possible predictive feature for malignancy in the literature. In the literature, only one study evaluated exophytic feature of thyroid nodules in neck CT (1). They reported malign thyroid nodules had more frequently exophytic configuration than benign ones without statistical significance. In our study, we did not find any difference in terms of ultrasonographical features and cytopathological results between exophytic and non-exophytic thyroid nodules. However, more comprehensive studies with larger sample sizes are needed to clarify any possible relation between exophytic configuration and malignancy.

References