



# P 1841- MALIGNANCY RATE OF THYROID NODULES WHICH DEFINED AS ATYPIA OF UNDETERMINED SIGNIFICANCE IN THE THYROID CYTOPATHOLOGY



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## AIM

- According the Bethesda classification for reporting thyroid fine-needle aspirations (FNAs), atypia of undetermined significance (AUS) is a category with limited reported follow-up and outcome data.
- True malignancy rate in AUS is not definitely known, because not all of them are histologically checked and also literature reports have heterogeneous data.
- Therefore, this classification is grey zone for clinicians who struggle the correct therapeutic approach to thyroid nodules.
- In this study, our aim was to evaluate the ultrasonographic features and histopathologic results of the thyroid nodules which are defined as AUS and contribute to the therapeutic approach of these nodules.

## METHODS

- We evaluated 95 nodules of 92 patients, who have nodular or multinodular goiter and had diagnosed AUS at least in one nodule with fine-needle aspiration (FNA).
- Patients' thyroid function tests, ultrasonographic features of the nodules and histopathologic results were evaluated.

## RESULTS

- 81.1 % of patients were female, 18.9 % were male. Mean age was  $47.5 \pm 12.1$  years.
- In the ultrasonographic features presence of microcalcification, border irregularity, peripheral vascularisation and absence of hypoechoic halo was respectively 28.4 %, 47.4 %, 20 % and 60 %.
- 43.2 % nodules were hypoechoic and 47.4 % were solid.
- According to the histopathology, 63.2 % of nodules (n=60) were benign, 36.8 % (n=35) were malign.

- In malign nodules papiller carcinom, well-differentiated thyroid neoplasm, follicular carcinom and hurthle cell carcinom were found respectively 88.6 %, 5.7 %, 2.9 %, 2.9 %.
- In malign nodules mean tumour size was  $1.2 \pm 1.1$  cm. No lymph node methastasis was found.
- Vascular invasion, capsular invasion, extracapsular invasion and multicentricity was positive respectively; 11.4 %, 28.6 %, 20 %, 31.4 %.
- According to the malign or benign histopathologic features of nodules were shown in table 1.

**Table 1 .** Histopathologic Features of Benign and Malign Nodules

		BENIGN n=44	MALIGN n=20	p
Nodule Component %	Solid	48,3	45,7	0,909
	Cystic	1,7	2,9	
	Mix	50	51,4	
Echogenity %	Isoechoic	85,3	51,4	0,370
	Hypoechoic	41,7	45,7	
	Hyperechoic	0	2,9	
Hypoechoic Halo %	Positive	36,7	45,7	0,385
	Negative	63,3	54,3	
Microcalcification %	Positive	28,3	28,6	0,980
	Negative	71,7	71,4	
Macrocalcification %	Positive	16,7	20	0,683
	Negative	83,3	80	
Border Irregülarıty %	Positive	51,7	40	0,272
	Negative	48,3	60	

## CONCLUSION

- In AUS, malignancy rate is reported 25 % of operated patients, but it is thought 5-10 % of the total.
- In our study we found this ratio 36.8 %. Our high ratio may be due to few and heterogeneous literature data outcomes.
- So, this high malignancy ratio in AUS nodules, have to be considered in the decision of operation .