# Sensitivity and specificity of thyroid cytology in the diagnosis of malignancy. Results of a series of 1567 thyroidectomies.

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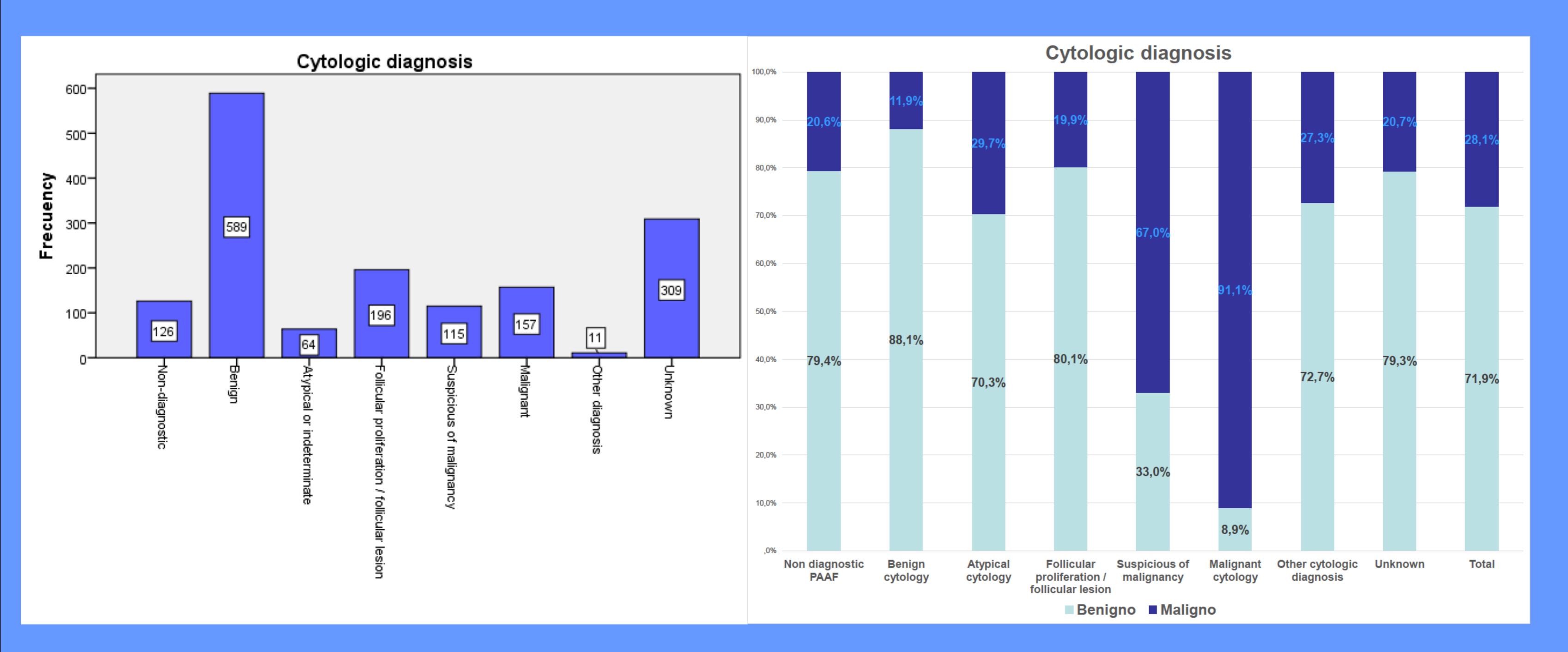
Hospitals of Cuenca, Guadalajara, Toledo, Ciudad Real, Talavera de la Reina y Ciudad Real respectively. Spain.

## Objectives:

Sensitivity and specificity of thyroid cytology in our series of thyroidectomies were evaluated.

#### Methods:

A retrospective, multicentered study of 1567 thyroidectomies performed in the 8 hospitals of Castilla La Mancha (Spain) during the years 2010-2013.



	A.P. Malignant	A.P. Benign	
PAAF malignant or suspicious of malignancy	220	55	275
PAAF Benign	70	515	585
	290	570	860

### Results:

The cytologic results were benign in 37.6% of cases, malignant or suspicious of malignancy in 17.3% (10% and 7.3% respectively). In 4.1% of cases the cytology was atypical or indeterminate and in 12.5% follicular proliferation / follicular lesion. There were 8% non-diagnostic cytologies. In patients whose prequirugical FNA was nondiagnostic, 20.6% had a carcinoma. Overall, 25.6% of patients had thyroid carcinoma. The sensitivity and specificity of suspicion of malignancy or malignant thyroid cytology for the diagnosis of malignancy was 75.8% and 90.3% respectively. There were 3.5% false positive and 4.5% false negative results.

# Conclusions:

Thyroid Cytology is the diagnostic technique of choice for the study of thyroid nodule. The results in terms of sensitivity, specificity and nondiagnostic cytology in our series are acceptable.

#### References:

1.-Negro R, Piana S, Ferrari M, Ragazzi M, Gardini G, Asioli S, Pacchioni D, Riganti F, Valcavi R. Assessing the risk of false-negative fine-needle aspiration cytology and of incidental cancer in nodular goiter. Endocr Pract . 2013; 19:444-450.

2.- Gürkan E, Kiyak G, Bozkurt B, Tokac M, Polt B, Cakir B, Güler G, Kilic M. Correlation of thyroid fine-needle aspiration with final histopathology:a case series. Minerva Chir. 2013; 68:191-197.



