

Clinical And Histopathologic Features And Follow-Up Of Paediatric Patients With Papillary Thyroid Cancer: A 10 Years Experience.

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Introduction and Objectives

The incidence of paediatric **papillary thyroid cancer (PTC)** is increasing. The aim of our study was to describe the clinical and histopathologic features at diagnosis, and follow-up of paediatric patients with PTC at Children's Hospital of Mexico in a 10 years period.

Methods

Comparative longitudinal study. We included 22 paediatric patients with histopathologic diagnosis of PTC between 2004-2014, divided into risk groups according to AJCC TNM classification system. Descriptive statistics were performed, Student's *t* test or Mann-Whitney U test for independent samples, Fisher's exact test to compare frequencies and Kaplan Meier estimator for disease free survival.

Results

Clinical, Biochemical and Ultrasound Characteristics of Paediatric Patients with Papillary Thyroid Cancer. 2004-2014.

	Total (n=22)	High Risk (n=14)	Intermediate-Low Risk (n=8)	p
Age at diagnosis (years)	11.68 ± 3.09	12.0 ± 2.96	11.13 ± 3.44	0.06 ^a
M/F	6/16	6/8	1/7	0.16 ^c
Time of symptoms (months)	4 (0 – 60)	2 (0 – 24)	7 (3 – 60)	<0.01 ^b
Dysphonia	4.5%	7.1%	0%	0.99 ^c
Dysphagia	9.1%	14.3%	0%	0.51 ^c
Dysthyroidism	18%	21.4%	12.5%	0.99 ^c
Volume increase in neck	100%	100%	100%	NS
TSH (µUI/mL)	2.45 (0.6 – 15.2)	4.56 (0.6 – 15)	1.3 (1.3 – 5.0)	0.26 ^b
T4L (ng/dL)	1.15 (0.9 – 2.0)	1.14 (0.9 – 2.0)	1.23 (1.0 – 1.9)	0.41 ^b
Anti Thyroperoxidase, positive	31.8%	38.5%	20%	0.43 ^c
Anti Thyroglobulin, positive	36.3%	46.2%	20%	0.32 ^c
USG (node)				
Size (cm)	2.5 (0.7 – 3.5)	2.5 (0.8 – 3.5)	2.5 (0.7 – 3.4)	0.57 ^b
Microcalcifications	40%	50%	25%	0.26 ^c
Hipoechoogenicity	60%	58.3%	62.5%	0.61 ^c
Increased central vascularity	77.8%	90.9%	57.1%	0.13 ^c
Irregular border	23.1%	20%	33.3%	0.58 ^c
Adenopathy	50%	58.3%	37.5%	0.32 ^c

^a Student's *t* test for independent samples

^b Man Whitney U test

^c Fisher exact test

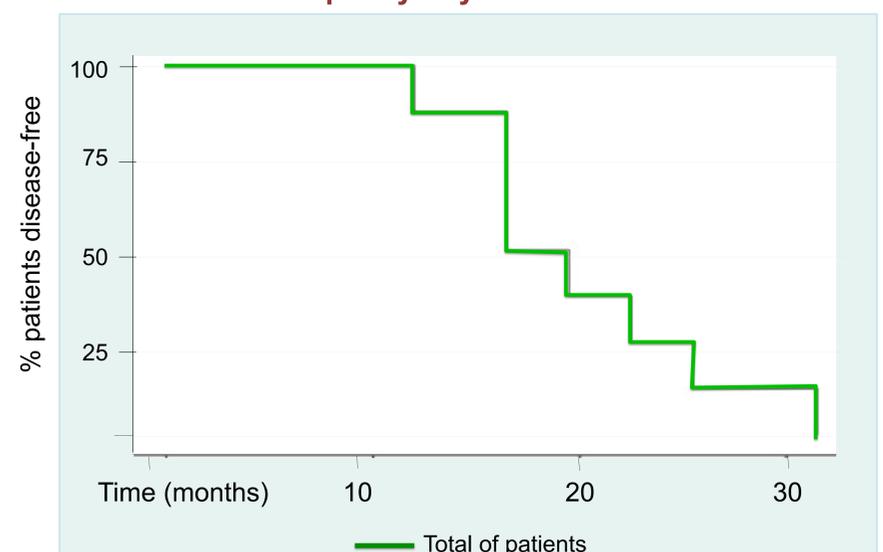
Histological Characteristics of Paediatric Patients with Papillary Thyroid Cancer. 2004-2014.

	Total (n=22)	High Risk (n=14)	Intermediate-Low Risk (n=8)	p
Aggressiveness of the tumor				
Size (cm)	2.7 ± 1.1	3.2 ± 0.95	2.11 ± 1.0	0.03 ^a
Lymph node metastasis (cervical)	63.6%	100%	0%	<0.001
Lung metastasis	13.6%	21.4%	0%	0.21
Extra capsular invasion	63.6%	100%	0%	<0.001

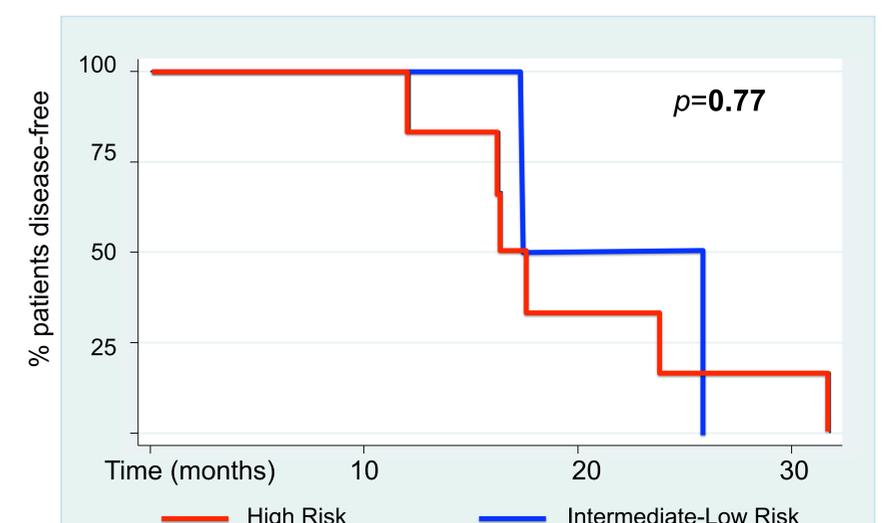
Fisher exact test

^a Student's *t* test for independent samples

Disease-free survival in Paediatric Patients with Papillary Thyroid Cancer.



Kaplan Meier, estimator disease-free survival (persistence and recurrence).



Kaplan Meier, estimator disease-free survival (persistence and recurrence) stratified by risk group.

Conclusions

In our series of patients, clinical features at diagnosis were similar to those described in the literature. In our study, the high-risk group had a higher frequency of persistence of disease at 3 years, different to reported in other series of patients.

References: *Clinical Endocrinology* 1998;49,619–628, *World journal of surgery* 2004;28:1088-1092