Prognostic factors related to recurrence in low–risk papillary thyroid cancer (PTC). A Multi-center study

P. Moreno[1], A. de la Quintana[2], J. Villar[3], C. Martinez[4], J.M. Francos[1], A. Arana[2], N. Muñoz[3], A. Garcia-Barrasa[1], J.I. Arcelus[3], G. Martinez[2] and JM Rodriguez[5].

[1]Unidad de Cirugía Endocrina. Hospital Universitari de Bellvitge-IDIBELL. Universitat de Barcelona. L'Hospitalet de Llobregat (BARCELONA). [2]Hospital Universitario Cruces, Barakaldo. [3]Hospital Universitario Virgen de las Nieves, Granada. [4]Hospital Costa del Sol, Marbella. [5] Hospital Universitario Virgen de la Arrixaca, Murcia.

INTRODUCTION

PTC usually has an indolent course. However, up to 25% could recur at 10 years of follow-up after total thyroidectomy. In the last two decades, prophylactic central node dissection has been proposed, trying to decrease the recurrence rate in clinically node-negative patients.

AIMS

To analyze the recurrence rate in ultrasound low-risk PTC patients (usT1-T2) and the influence of prophylactic Central Neck Dissection (pCND) on it

PATIENTS & METHODS

Multi-center retrospective study including PTC patients operated on since 1999.

INCLUSION CRITERIA:

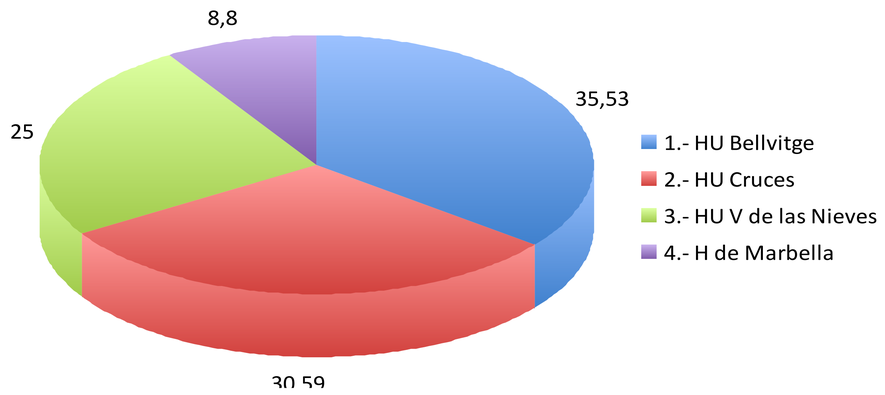
1.- Preoperative T_{1-2} ultrasound-based stage (usT_1-T_2).

2.- Patients with incidentally discovered PTC were also included.

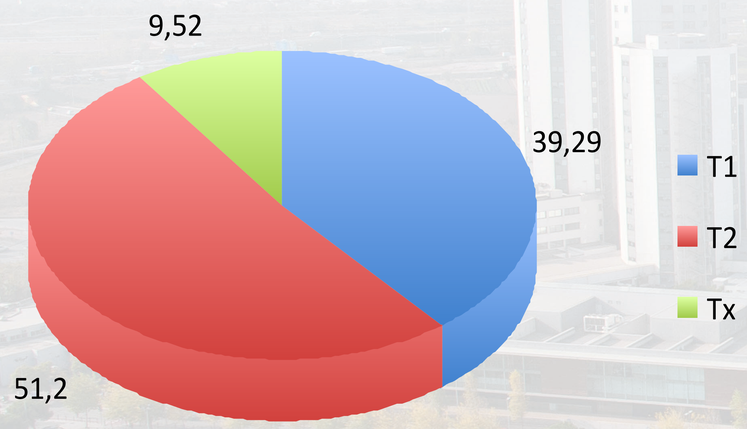
3.- All patients underwent total thyroidectomy (TT), with or without central node dissection.

Recurrence rate was analyzed related to variables including age, sex, pTNM, multicentricity, nodal yield and MACIS score.

PARTICIPANT HOSPITALS



ULTRASOUND T Stage (usT)



RESULTS

		RECURRENCE		
	Global (n=304)	**NO (n=265)**	**YES (n=39)**	**p**
AGE (m±SD)	45,7±14,8	45,65±14,1	46,05±19,5	0.902
SEX Female	245 (80,6%)	146 (82%)	21 (18%)	0.224
SIZE (cm.)	22,0±11,4	21,8±11	23,4±10	0.405

		RECURRENCE		
	Global (n=304)	**NO (n=265)**	**YES (n=39)**	**p**
US Stage				
T_1	115 (44,4%)	103 (89.6%)	12 (10.4%)	0,087
T_2	144 (55,6%)	118 (81.9%)	26 (19%)	
Multicéntricity	65(23,2%)	1(22,1%)	12(30,7%)	0,226
Unilateral	37(13,2%)	32(13,3%)	5(12,8%)	0,335
Bilateral	28(10%)	21(8,8%)	7(17,9%)	

		RECURRENCE		
	Global (n=304)	**NO (n=265)**	**YES (n=39)**	**p**
T Stage				
pT_1	144(47,3%)	132(50,5%)	12(30,7 %)	
pT_2	107(35,2)	1(32,9%)	21(53,8%)	0,087
pT_3	48(15,7%)	42(16,1%)	6(15,8%)	
pT_4	1(0,3%)	1(0,4%)	0(0%)	
N Stage				
pN_0	62(24%)	60(26,7 %)	2(6%)	**0,015**
pN_1	76(29,5%)	61(27,1%)	15(45,4%)	
pN_x	120(46,5%)	1(46,2%)	16(48,5%)	

		REURRENCE		
	Global (n=304)	**NO (n=265)**	**YES (n=39)**	**p**
CND YES	122 (42,2%)	111(91%)	11 (9%)	0,505
CND NO	167 (57,8)	141 (84.4%)	26 (15.6)	
CND Prophylactic	41(14,1%)	36(87.8%)	5(112.2%)	0,505
CND Therapeutic	81 (85.9%)	75 (92.6%)	6 (7.4%)	
MACIS ≤ 6	38(18,9%)	146 (89.6%)	17 (10.4%)	**<0.01**
MACIS > 6		26(68.4%)	12(31.6%)	

CONCLUSIONS

1.- Preoperative US studies understimated T_3 in 16% of cases

2.- pCND does not preclude recurrence.

3.- Only involvement of lymph nodes in central compartment and MACIS score >6 predicts recurrence in low-risk papillary cancer patients.

4.- Larger series are needed to clarify the definite impact of pCND on recurrence

Generalitat de Catalunya **Departament de Salut**

Institut Català de la Salut **Gerència Territorial Metropolitana Sud**

Bellvitge Hospital Universitari

IDIBELL Institut d'Investigació Biomèdica de Bellvitge

Universitat de Barcelona