



LOCAL CLASSIFICATION OF DIFFERENTIATED THYROID CANCER. DOES IT ALLOW TO DISCRIMINATE THE RESPONSE TO TREATMENT?

F. Gajardo, C. Pereira, V. Inostroza, C. Campos, P. Invernizzi, F. Vásquez, P. Hernández, A. Ladrón de Guevara, M. Domínguez, E. Díaz, N. Crisosto.
Unit of Endocrinology, Hospital San Juan de Dios, Santiago, Chile.

INTRODUCTION: Differentiated Thyroid Cancer (DTC) is distinguished for having a low mortality but it could reach recurrence until 30% in five years. The prediction of the risk of recurrence in Chile is different from ATA. The use of the stimulated thyroglobulin (Tg) post-surgery in the prediction of the risk is controversial. We present a cohort applying a new local protocol that includes the Tg for supporting the discrimination of the patients for offer low doses or radio iodine.

OBJECTIVE: Assess if the local risk classification (LC) that we use allows us to discriminate the response to the treatment (RT).

METHODS: Analysis of medical records from the patients with total thyroidectomy for DTC during 2013. Compared the LC with the ATA risk stratification scale. We evaluated the response to the treatment after a year of evolution according with the levels of suppressed and stimulated Tg and images. The results were divided in excellent or acceptable/incomplete.

For the statistical analysis we used Mann-Whitney proof, for the continuous variables and X² for non-continuous variables. We excluded patients with positive Tg Antibodies.

RESULTS: 96 patients were analysed from them 87,5% were women. The mean age was 50,4 years ±14,5. The thyroidectomy was total in a 100%. Histological type was: 92,7% papillary, 3,1% follicular, 4,2 % mixed. 68,7% received radio iodine in doses from 30 to 150 mCi; in the group of very low risk LC no one went to ablation tab 2.

Tab. 2 Doses of Radioiodine

Local Risk Classification	Dose of Radio Iodine		
	Median	P25	P75
Very Low Risk	0	0	0
Low Risk	30	30	100
Intermediate Risk	100	100	150
High Risk	150	150	150

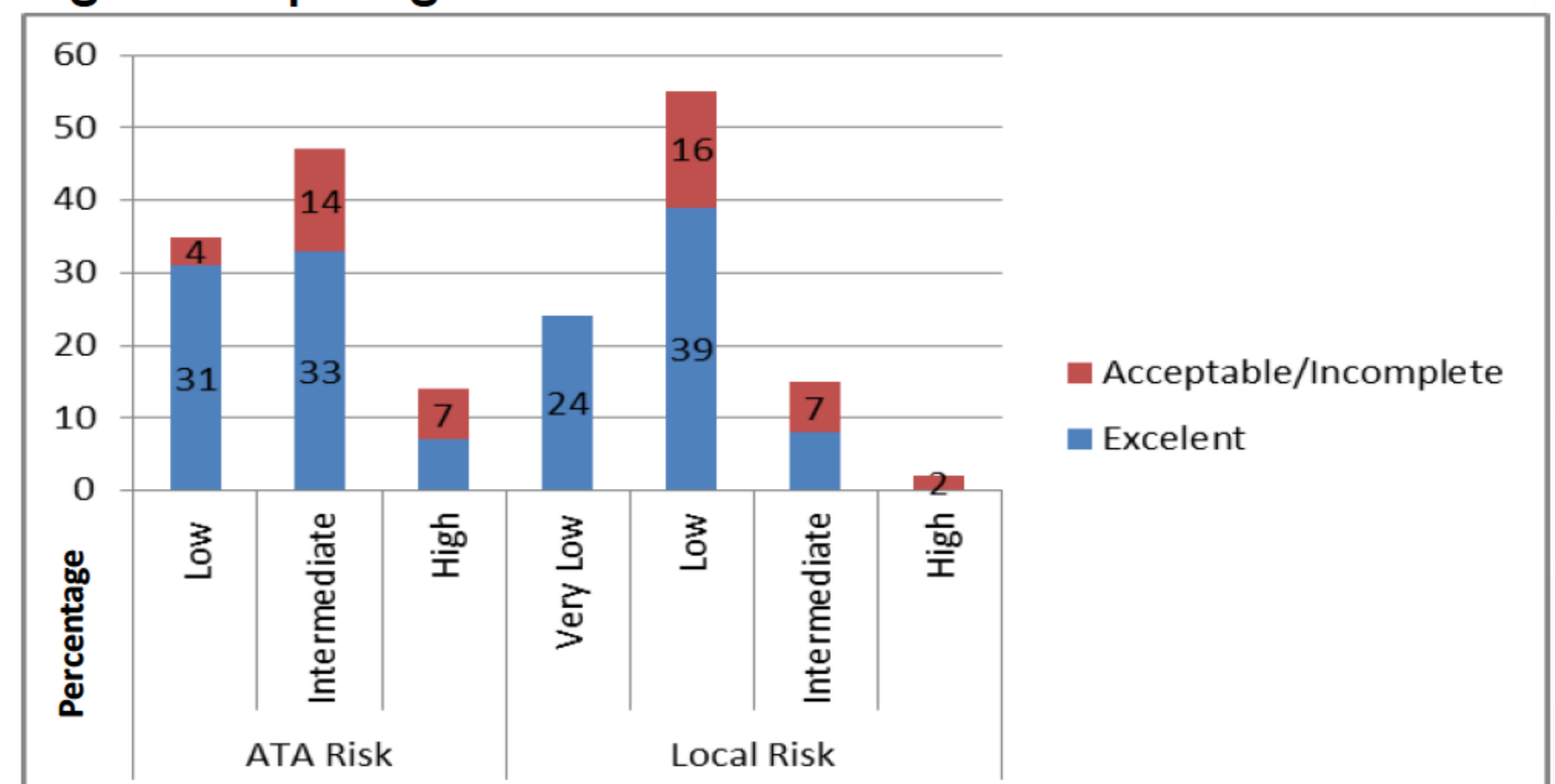
RT was excellent in 74%, acceptable in 20% and incomplete in 6,2%. Using the cohort value of the Tg lower than 2ng/dl, we get an LR of 0,22 for predicting a good response.

Comparing the RT between two scales (ATA vs LC): In the Very Low risk the response was excellent in 100% (p=<0,001). For the rest groups see fig 1.

Tab 1. Local Risk Classification

Risk HSJDD	Characteristics
Very low Risk Without RI	Tumor less or equal of 2 cm uni or multifocal: - Etapification ultrasound scan and cervical exploration without lymph nodes. - Vascular invasion (-) - Without aggressive histology. - Minimal extrathyroid extension (Adipose tissue) - Regional lymph node metastasis in definitive biopsy < or = 5 mm and less of 5 lymph nodes. Tg post surgery < 2 ng/dl.
Low Risk 30mCi RI	Tumor less or equal of 4 cm uni o multifocal: - Aggressive Histology - vascular invasion(+). - Minimal extrathyroid extension (muscle) - Lymph nodes in definitive biopsy >5 mm and/or ≥ 5 lymph node metastasis. Tg 2- 20 ng/dl.
Intermediate Risk 100mCi RI	Tumor less or equal of 2 cm: - Tg 20- 50 ng/dl Tumor between 2 y 4 cm: - Aggressive Histology. - Vascular invasion (+). - Lymph nodes metastasis in definitive biopsy > 5 mm and/or ≥ 5 lymph nodes metastasis. - Complete resection of macroscopic extrathyroid extension. Tg 20-50 ng/dl.
High Risk 150mCi RI	- Any T with Tg more than 50 ng/dl. - Extrathyroid extension no resected or any T with distant metastasis.

Fig 1. Comparing the RT between two scales



Low Risk ATA vs LC. p= 0,0
Intermediate Risk ATA vs LC. p= 0,229
High Risk ATA vs LC. p= 0,47.

CONCLUSIONS: In the local classification all the patients with very low risk presented excellent response to the treatment, allowing discriminate better this group. The rest categories concentrated patients with a worse evolution.

References:

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