# MEDULLARY THYROID CANCER (MTC): DESCRIPTIVE ANALYSIS AND PROGNOSTIC FACTORS IN A MULTICENTER STUDY

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#### INTRODUCTION

MTC accounts for 5% of thyroid cancers and can occur sporadically or as part of the multiple endocrine neoplasia type 2 syndrome (MEN 2). The objective of our study is to evaluate the prognostic factors and outcomes of patients with MTC.

### METHODS

Retrospective descriptive multicenter study of patients with histological diagnosis of MTC. Descriptive, bivariate analyses (Student t for cuantitative and X2 test for cualitative variables) and logistic regression with SPSS 19.0 were performed.

#### RESULTS

**102 patients** were included (62% females). Median age at diagnosis: 45+16 years. Mean follow-up: 8 years. **RET proto-oncogene mutations** were found in 52% mainly in codon 634 (24.5%). Average basal calcitonin was  $1497 \pm 3521$  (median 402 pg/ml) and CEA  $66 \pm 130$  ng/ml. All cases underwent total thyroidectomy, with cervical lymphadenectomy in 64 cases (63%). Stage after surgery was I: 39%, II: 12%, III: 16% and IV: 33%. **Residual disease** was found in 45% (42% biochemical, 35% loco-regional and 24% distant metastasis).

#### Stage after surgery



They were treated with additional surgery (44%), radiotherapy (11%) and/or tyrosinkinase inhibitors (13%).

At the end of the follow up, 48% patients remained free of disease, 9% had calcitonin/CEA levels elevated without disease location, 8% had locorregional disease and 8% distant metastasis; 5 patients died because of MTC.

On bivariate analysis, absence of cromogranin A staining, stage, local invasion, male sex, postsurgery calcitonin, postsurgery CEA levels and size were statistically significant predictors of residual disease after surgery whereas local invasion and stage, predicted persistent disease at the end of follow-up.

Stage remained the only statistically significant indicator of both residual disease after surgery and persistent disease at last follow up on logistic regression analysis.

## Postsurgery persistent disease predictors





#### CONCLUSION

Only staging was significantly associated with

persistent disease after surgery and at the end of follow-up on logistic regression analysis.

