

## **DIFFERENTIATED THYROID CARCINOMA PATIENTS WITH DISTANT METASTASES: A 27-YEAR FOLLOW-UP STUDY**

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**AIM:** The purpose was to evaluate the mortality of differentiated thyroid carcinoma (DTC) patients with distant metastases (M1).

**MATERIAL AND METHODS:** From 1977 to the end of 2000, radioiodine (RAI) therapy was performed in 363 DTC patients. Among them 74 patients had M1 and were followed up to the end of 2004. Thirty- nine patients with M1 died during the follow-up. Evaluation of data was done by Cox-Regression and Kaplan-Meier's method.

**RESULTS:** The analysis of 39 deaths among patients with M1 detected 31 (79.5%) disease related deaths and 8 (20.5%) deaths independent of thyroid carcinoma. Patients with disease related deaths included 17 (54.8%) women and 14 (45.2%) men; 6 patients were <45 years old and 25 patients were ≥45 years old (range=37-69 years; median age=54.2 years); histologically, there were 15 papillary carcinomas, 15 follicular carcinomas, and one inconclusive histological report. Disease related deaths showed: M1 in 21 patients, locoregional progression of disease combined with M1 in 6 patients, locoregional progression of disease in 2 patient, and complications of initial treatment in 2 patients. Deaths independent of thyroid carcinoma showed: thromboembolism in 2 patients, lung carcinoma in 1 patient, breast carcinoma in 1 patient, bronchial asthma in 1 patient, stroke in 1 patient and hemorrhagic ulcer in 1 patient. Probability of survival after appearance of M1 was 60.7% after 5 years, 51.2% after 10, and 38.4% after 15 years. According to the initial treatment, patients with M1 were divided into three groups: (1) adequate surgery and RAI therapy; (2) insufficient surgery and RAI therapy, or adequate surgery only; and (3) insufficient surgery only. Significant dependence ( $p=0.0237$ ) was found between initial treatment and survival of patients with M1 – the longest survival was in patients who received adequate surgery and RAI therapy.

**CONCLUSION:** Mortality of DTC patients with M1 is relatively high, but may be decreased by proper multidisciplinary treatment. Relatively frequent disease related deaths might be decreased by adequate surgery and RAI therapy