

DIFFERENTIATED THYROID CARCINOMA AND RECURRENCES OF DISEASE

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AIM: To establish the frequency of differentiated thyroid carcinoma (DTC) recurrences, investigation of their outcomes, and analysis of factors influencing their appearance.

PATIENTS: 363 patients (pts) were treated by radioactive iodine ^{131}I (RAI) between 1977 and 2000 and followed till the end of 2004.

METHODS: All pts were operated, treated by RAI (in some pts RAI was not applied in the initial treatment) and by life-long hormonal therapy. Descriptive Statistics, Cox Regression and Kaplan-Meier's method were used in the analysis.

RESULTS: The recurrences appeared in 85 pts (27.7% of DTC pts in remission after initial therapy). They developed from 6 months to 21.5 years after initial therapy. The recurrences were treated by surgery, RAI, external beam therapy and chemotherapy, in different combinations of these treatment modalities. Complete remissions after treatment of recurrences were achieved in 29.5% of pts, disease related deaths occurred in 39 of pts; this is very significantly different ($p < 0.001$) comparing to pts without recurrences (complete remissions in 86.6% of pts, disease related deaths in 6.5% of pts). The appearance of recurrences was significantly dependent upon initial therapy (less frequent if surgery is adequate and RAI therapy is applied; $p < 0.001$), age of pts (less frequent if pts are < 45 years old; $p < 0.001$), accumulation of RAI in tumor (less frequent if tumor accumulates RAI; $p < 0.001$), completeness of remission (more frequent if remission is partial; $p < 0.001$) and stage of disease (more frequent in Stage IV; $p < 0.004$); pathohistologic type of DTC and gender of pts had no significant influence ($p > 0.126$, $p > 0.933$, respectively).

CONCLUSION: It is often difficult to treat recurrences of DTC, their prognosis is bad in many cases, and disease related deaths are relatively frequent. It is possible to reduce the frequency of recurrences by initial therapy (adequate surgery, after that RAI therapy) and by intensive active therapy till the achievement of complete remission.