

Rational Therapy Selection in Papillary Thyroid Cancer

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Despite the great wealth of knowledge concerning the biologic behavior of papillary thyroid carcinoma, there is no consensus regarding its treatment.

In order to determine optimal treatment modalities, a retrospective analysis of 1,284 papillary thyroid cancer patients treated over a period of 18 years was carried out particularly focusing on the diagnostic accuracy of fine needle aspiration biopsy (FNAB) and intraoperative frozen section examination (FS), as well as the extent of thyroidectomy and the necessity of neck dissection, and their impact on treatment outcomes.

FNAB was as reliable as FS diagnosis in predicting papillary carcinoma (93%), and the discrepancy rate between the two studies was almost negligible. The surgical procedures used were : 720 lobectomy with isthmusectomy or subtotal thyroidectomies, 547 total or near-total thyroidectomies, and 17 debulking surgeries. Among patients, 371 had various types of lateral neck dissections for clinically-

positive neck nodes. Six hundred and forty eight patients were followed-up for from 8 to 21 years (mean 13.9 years), of which 559 patients (86.3%) were in the low-risk group and 89 (13.7%) in the high-risk group. The recurrence rate in the lateral neck of patients who did not have prophylactic neck dissection was only 7.5%. There were no significant differences in recurrence and death rates between the less-than-total and the total thyroidectomy groups in low-risk patients. However, the recurrence and disease-related mortality of patients in the high-risk group was significantly higher (44.9% recurrence, 22.5% death rate) than that of patients in the low-risk group (16.1% recurrence, 0.4% death rate).

The review suggests that selection of the optimal treatment for papillary thyroid carcinomas should be individualized based on the particular clinical situation encountered : a conservative approach for patients at low risk and an aggressive approach for those at high risk.