

# Surgery and Prognostic Consideration in Differentiated Thyroid Cancer

-A Review of Personal Experience-

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For the past 10 years, the incidence of thyroid cancer has been rapidly increased with breast cancer in female population showing current incidence of 4500 new thyroid cancer patients annually in Korea.

Our series of 954 patients with DTC surgically treated between 1980 and 2004 were reviewed in the aspects of the surgical procedures, clinical staging, risk factors, recurrence and their outcome through median follow-up period of 10.5 years.

Recurrence in remnant thyroid, cervical nodes, and distant metastasis were observed in 84 patients (8.8%), 49 patients were treated by second operation, third operation was performed in three patients for 6 years survival, and 31 patients were confirmed to be died of locoregional recurrence of cancer and distant metastasis.

Regarding the risk factors to recurrence, tumor size, extra-thyroidal invasion and nodal metastasis were significant predictors ( $p < 0.01$ ) and the mortality was closely related with distant metastasis, old age with extrathyroid invasion ( $p < 0.01$ ).

Overall 10-year survival rate was 92.4%, but low-to-intermediate risk patient showed 94.4% and high risk patient showed 70.5% ( $p < 0.01$ ).

Surgical treatment options for DTC remain still relatively unchanged. Preoperative high-quality ultrasonography facilitating more complete resection of disease (total thyroidectomy and systematic compartment-oriented neck dissection) potentially minimize locoregional recurrence, and will improve survival rate for high-risk and refractory thyroid cancer patients.