

Prophylactic Central Lymph Node Dissection in the Clinically Node-Negative (cN0) Papillary Thyroid Carcinoma - Is it Beneficial?

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Objective: Surgery is the treatment of choice in Papillary thyroid cancer (PTC) which frequently has metastases in the Central compartment lymph nodes (CLN). There is debate among surgeons whether removing normal appearing lymph nodes in the central neck (prophylactic lymph node dissection) is better than removing only the abnormal appearing lymph nodes. Herein, we review the potential utility of CLNdissection (CLND) on surgical outcome in the Clinically Node-Negative (cN0) PTC and disease-free survival (DFS) of PTC and 7-year overall survival (OS) was analyzed.

Methods: A total of 268 patients from November 2008 to August 2011 who were treated for PTC in our Kidwai Cancer Institution was analyzed retrospectively. 141 patients who underwent total thyroidectomy and CLND were assigned to Group -A which was compared with 124 patients who received total thyroidectomy, without CLND who were assigned to Group -B by evaluation of postoperative complications (Recurrent laryngeal nerve damage, hoarseness, hypocalcemia, and hemorrhage rates) and recurrence at 84 months follow up. Pearson chi-square and odds ratio for categorical variables were used in the univariate analyses and Kaplan Meir curve was plotted of the clinical characteristics using SPSS version 22. P value <0.05 was considered as statistically significant

Results: In the present study Mean DFS was better in Group -A in Male gender (95% Confidence Interval (CI) 43.441-52.901 mean 48.171 p= 0.04) and age more than 45 years (95% CI 40.222-46.939 mean 48.171 p= <0001) which was statistically significant but without any impact on OS compared to Group -B. There was a significant postoperative complication in Group A compared to Group B (p= <0.001) with a very minimal recurrence in the central neck (6/124 (4.8%) in Group B)

Conclusion: Comparing the significant postoperative complication which outweighs benefit we conclude that for cN0 PTC routine CLND is not necessary