

## **RATE AND DISTRIBUTION OF LYMPH NODE METASTASIS FROM PAPILLARY THYROID CARCINOMA (PTC) ACCORDING TO THE LOCATION OF THE PRIMARY TUMOR**

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**Background/Purpose:** Prophylactic central neck dissection(CND) in all patients undergoing thyroidectomy for PTC is controversial. Due to potential morbidity after CND, it has been suggested that this procedure be reserved for patients at higher risk of lymphnode metastasis. This study aims to investigate the relationship between primary tumor(T) localization and metastasis rate and distribution in patients with PTC.

**Methods:** Clinical records of all patients(536) operated on for PTC at our Institution in the years 1996-2011 were retrospectively reviewed. Information about T location (upper, middle, lower third of each lobe and isthmus) were derived either from pre-operative ultrasonography or from pathologic reports.

**Results:** 263 patients met inclusion criteria. Of these, 122 patients had lymphnode metastases. T location in N1 vs N0 patients was: upper third, 30 vs. 43; middle third, 49 vs. 58; lower third, 37 vs. 28; isthmus, 6 vs. 12. In our series, patients with monofocal PTC had a higher risk of central neck compartment node metastasis when T was located in the isthmus. Bilateral central neck involvement was greater in the isthmus. The risk of lateral neck involvement was apparently greater in the upper third.

**Discussion & Conclusion:** Our data suggest that in patients with PTC, rate and distribution of neck node metastasis is influenced by the location of the primary. Should these data be confirmed in larger series, the planning of the surgical treatment should be accordingly tailored.