

## **OPTIMAL SURGICAL MANAGEMENT FOR PAPILLARY THYROID MICROCARCINOMA IN ENDEMIC ZONE- AN EXPERIENCE FROM A THYROID SURGERY CENTER OF NORTH INDIA.**

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**Background/Purpose:** The incidence of papillary thyroid microcarcinoma (10mm or less in maximum diameter) increasing because of frequent use of ultrasound guided fine needle aspiration cytology. Majority are still diagnosing after surgery. The risk of local or distant metastasis or recurrence of this microcarcinoma is inadequate in literature. Therefore the extent of thyroid surgery is controversial. Aim is to evaluate an optimal extent of surgery for an apparently solitary papillary thyroid microcarcinoma in an endemic zone.

**Methods:** This is a retrospective study from a single center specialized in thyroid surgery in north India. All patients with apparently solitary papillary thyroid cancer who underwent primarily total thyroidectomy at Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, India between 1996 to 2010 were included in present study. Demographic characteristics, tumor characteristics, TNM stage and histopathological characteristics were the study variables. Exclusion= patients with pre-operative bilateral disease, or underwent less than total thyroidectomy or completion thyroidectomy.

**Results:** One hundred one patients were found suitable for this study, they were divided into two groups. Group A- Papillary Thyroid Microcarcinoma (n=16) and Group B- Papillary Thyroid Cancer with Tumor size >1cm (n=85). The results were analyzed for the risk factors of aggressiveness. Multivariate analysis of multicentricity ( $p= 0.65$ ); bilaterality ( $p= 0.98$ ); extra-thyroidal invasion ( $p= 0.58$ ) and cervical lymph node metastasis ( $p= 0.77$ ) were not significant.

**Discussion & Conclusion:** Our result indicates that the microscopically evident of multicentricity, bilaterality, extra-thyroidal invasion and cervical lymph node metastasis are comparable in papillary thyroid microcarcinoma group is lower therefore the Total thyroidectomy is not necessary for apparently solitary papillary thyroid microcarcinoma in endemic zone.