Background/Purpose: Lateral cervical lymph node metastasis (LCLNM) in papillary thyroid cancer (PTC) occurs not infrequently and it is related to recurrence and distant metastasis. Preoperative ultrasonography (US) is usually performed to detect primary tumor and lymph node metastasis. This study was aimed to find relationship between specific US findings and LCLNM.

Methods: We reviewed 220 patients with PTC who underwent total thyroidectomy and neck dissection from January, 2008 to December, 2009. We divided US findings according to the nature (solid / mixed), shape (round to ovoid / irregular / taller than wide), echogenecity(isoechoic / hypoechoic / markedly hypoechoic), and margin (well defined / ill-defined)and evaluated the correlation between those findings and LCLNM.

Results: Of the patients, LCLNM was found in fourteen patients. Nature, shape, margin were not related to the LCLNM. All of patients with LCLNM showed hypo- or marked hypoechogenecity. On multivariate analysis, only marked hypoechogenecity was related to LCLNM (OR = 6.186, p = 0.027).

Discussion & Conclusion: Specific US findings, including marked hypoechogenecity and other types of calcification, may assist in finding LCLNM.