Abstract 34.

Risk for central metastasis on papillary thyroid cancer patients with suspicious lateral lymph nodes and non suspicious central LN on preoperative staging ultrasound (US)

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We aim to establish the risk for clinically relevant central lymph node metastasis (CRCM) on papillary thyroid cancer (PTC) patients with suspicious lateral lymph nodes on preoperative ultrasound (SLN) and non suspicious lymph nodes on the central compartment. Retrospective review of PTC patients with a preoperative staging US showing SLN, who underwent lymph node resection at our institution, between 2013 and 2017. We defined as suspicious lymph node, central or lateral, those with micro/coarse calcifications, cystic areas, hyperechoic spots, and hypervascularization with capsular vessels.

We studied the risk for CRCM >2mm and ≥5mm on pathology and categorized our patients according to the central neck preoperative staging US on suspicious, uncertain and normal. We defined as “uncertain” those prominent central lymph nodes associated with Hashimoto’s Thyroiditis, peri-istmic/infrathyroid, hypoechoic and with no hilum; or those accompanying an identified PTC that do not have typical suspicious characteristics.

Finally, we studied other preoperative variables in order to assess their impact on the risk for CRCM. We reviewed 77 patients (65% women, median age 39 years). CRCM >2mm were present on 74% (57/77), whereas CRCM ≥5mm, on 45% (35/77). According to the evaluation of the central compartment on US, 36% (28/77) had a normal sonographic pattern: of them, 68% (19/28) had CRCM >2mm and 32% (9/28) had CRCM ≥5mm. An uncertain central US pattern was established on 21% (16/ 77): of them, 69% (11/16) had CRCM >2mm and 50% (8/16) CRCM ≥5mm. On the assessment of preoperative variables, presenting ≥3 SLN was significantly associated to an increased risk for CRCM >2mm (68% vs 97%, p = 0.002) and for CRCM ≥5mm (37% vs 68%, p = 0.014). A significant risk for CRCM exists on PTC with SLN on the staging preoperative US, which is maintained even for patients with normal central sonographic patterns. The risk increases for patients with uncertain central lymph nodes on the US. Larger number of SLN on US is significantly associated to a greater risk for central metastases. This information should be used to consider central lymph node dissection when SLN are detected on staging US, even in the absence of suspicious central LN.