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LETTER TO THE EDITOR

What's the role of surgery in the management of primary thyroid lymphoma?

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To the Editor,

Primary thyroid lymphoma (PTL) is a very rare type of thyroid tumor, constituting about 5% of all thyroid malignancies and less than 3% of all non-Hodgkin's extranodal lymphomas [1,2]. Due to its rarity, experience regarding the management of patients with PTL remains relatively limited. However, PTL should be promptly diagnosed and appropriately treated, because its management and prognosis differs significantly from that of the other more common thyroid neoplasms. Surgery may have a diagnostic and a therapeutic (albeit more limited) role in the management of patients with PTL.

Diagnostic evaluation of the patient with PTL includes a careful clinical examination, laboratory investigation, imaging of the neck/thyroid (most commonly by using neck ultrasonography and occasionally computed tomography or more rarely magnetic resonance imaging). Fine-needle aspiration (FNA) is an essential tool in the diagnostic evaluation of nodular thyroid disease. However, FNA has yielded inconsistent results in the diagnosis of PTL [1–3]. Rates of achieving a positive diagnosis range widely in the literature, from 25% to 90% [3]. In a significant percentage of cases (50 to 60%), FNA results are suggestive but not diagnostic. The frequent coexistence of Hashimoto's thyroiditis in patients with PTL may complicate the interpretation of the results of FNA. When diagnosis is uncertain or difficult, open surgical biopsy is the diagnostic method of choice, allowing accurate and definitive diagnosis. Of note, some authors – despite having diagnosed PTL by FNA in a very large percentage of patients (~80%) – have recommended open biopsy in all cases in order to definitely diagnose PTL or

subtype and grade PTL [3]. This is especially important when treatment strategies or prognosis differ depending on the histological subtype (i.e. MALT vs. diffuse or mixed large cell PTL) [4].

Surgery remains highly questioned in the treatment of PTL. Surgery alone has been proposed for the management of localized (stage IE) intrathyroidal MALT lymphoma. This type of PTL has a relatively benign biological behavior and remains localized for a long time; consequently local treatment options (such as surgery or radiation therapy) have been effective, with reported disease control rate up to 100% [1,4]. When there is any question of incomplete surgical resection, adjuvant external beam radiation therapy should be considered postoperatively. In clinical practice, MALT lymphoma is often diagnosed only after thyroidectomy and some clinicians believe that surgery alone may be inadequate in terms of local control, thereby referring their patients for adjuvant radiation therapy or combined chemoradiation postoperatively.

Other groups, however, have questioned the role of surgery in the management of PTL. In a large series from the Mayo Clinic (n = 62 patients, treated between 1965 and 1989), Pyke et al. found that complete remission rates were similar (85% and 88%, respectively) in stage IE (extrathyroidal) and IIE cases whether they received debulking surgery followed by radiation versus biopsy only followed by radiation [5]. These authors concluded that larger debulking procedures conferred no survival advantage. In the series of patients reported by Ha et al. [2], recurrence was observed in three of the four patients treated by surgery alone. Authors arguing against thyroidectomy emphasize that surgery may

be associated with potential morbidity without improving survival [2,5]. Currently, chemoradiation therapy is favored by most authors in the management of PTL.

Palliative surgery may occasionally be required to relieve pressure symptoms and mainly airway obstruction, especially in patients who do not respond rapidly to non-surgical treatment. Under these challenging circumstances, experience is required from the part of the operating surgeon to diminish operative morbidity when operating these bulky tumors. However, given the effectiveness of modern chemoradiation therapy, this scenario is rarely seen, and therefore significant relief from pressure symptoms can be achieved without the need for an invasive (surgical) intervention [3]. The placement of tracheal stents is another alternative, which can be used for temporary palliation from airway compromise without surgical intervention while awaiting a response to chemoradiation therapy.

Declaration of interest: The author reports no conflicts of interest. The author alone is responsible for the content and writing of the paper

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