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Laryngeal lymphoma: a case report

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Abstract: Primary laryngeal lymphoma is a rare entity, accounting for less than 1% of all primary laryngeal neoplasms. It is mainly primary non-Hodgkin's malignant lymphoma (NHLM). We report a new case in a 56-year-old woman who presented with progressive onset dysphonia [1],. Laryngoscopy revealed a budding lesion of the glotto-supglottic level (vocal cords, arytenoids, ventricular bands, epiglottis). Histology showed a peripheral T-cell lymphoma, CD3 and Ki67 positive, this pathology is difficult to diagnose, requires particular vigilance and should be managed according to current treatment trends for nodal LMNH

Keyword: larynx, Non-Hodgkin lymphoma, T-cell lymphoma, dysphonia, a case report

Introduction:

Non-Hodgkin's malignant lymphoma (NHML) of the larynx is a rare condition, constituting for less than 5% of all malignant tumors [2]. Primary localization in the larynx is exceptional, representing less than 1% of laryngeal tumors with fewer than 100 cases have been reported in the literature.

Material:

We report the case of a 56-year-old patient with LMNH of primary laryngeal localization.

Clinical case:

The patient, 56-year-old woman with no particular medical or surgical pathological history, has been experiencing dysphonia for two years, initialy intermittent, then perennial a year ago, with no dyspnea or dysphagia, or other extra-ORDL signs, notably no peripheral adenopathies, the condition evolved in a context of apyrexia and preservation of general condition.

The nasofibroscopy revealed a budding lesion involving the entire circumference of the larynx and the various glotto-sus glottic stages with arytenoid edema (Figure 1).

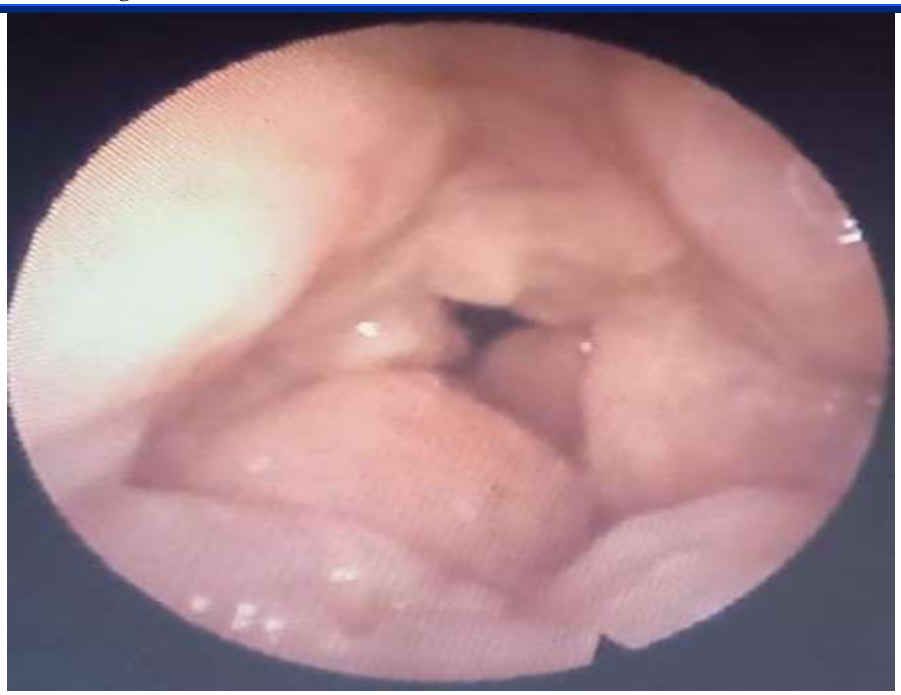

Figure 1: nasofibroscopy image showing a glotto-sus glottic stage completely invaded by the tumor

The CT scan of the larynx in axial section demonstrated a tissue process centered on the glottic stage, extending to the supraglottic stage. It was circumferential, predominantly on the left, causing a reduction in the laryngeal lumen. The process obliterated the valleculae, folds, and piriform sinuses, exhibiting tissue density. After injection of radiocntrast, it showed a fairly well-limited heterogeneous enhancement, measuring 16mm in maximum thickness (figure 2).

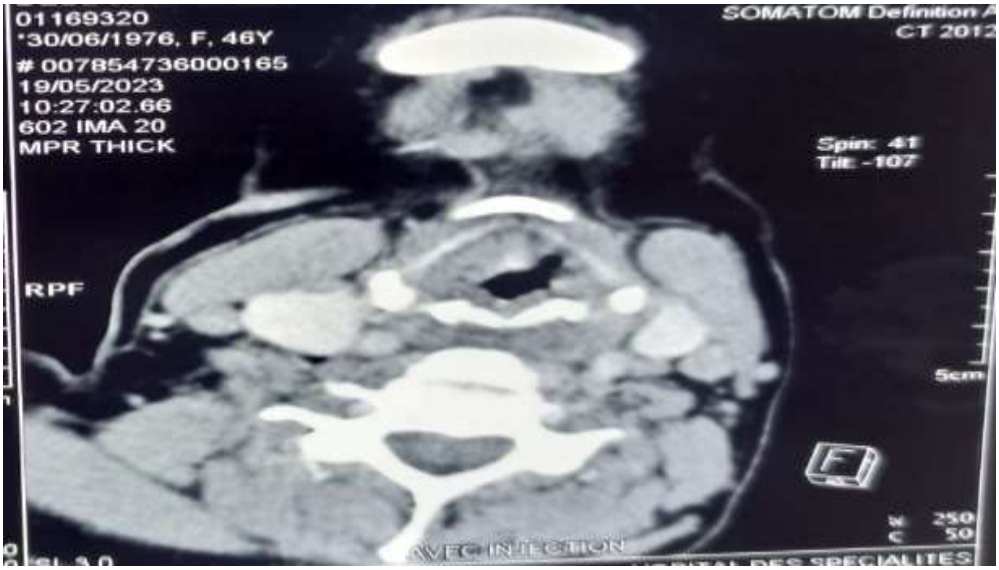

Figure 2: Laryngeal CT scan in axial section showing a tissue process in the larynx

Direct laryngoscopy under general anaesthesia revealed: budding lesions involving all glottic stages from the epiglottis, vocal cords and ventricular bands, with a glottic cleft that remained permeable and edema of the arytenoids.

Deep biopsies were taken, with histological findings of peripheral T lymphoma, CD3 and Ki67 positive (figure 3).

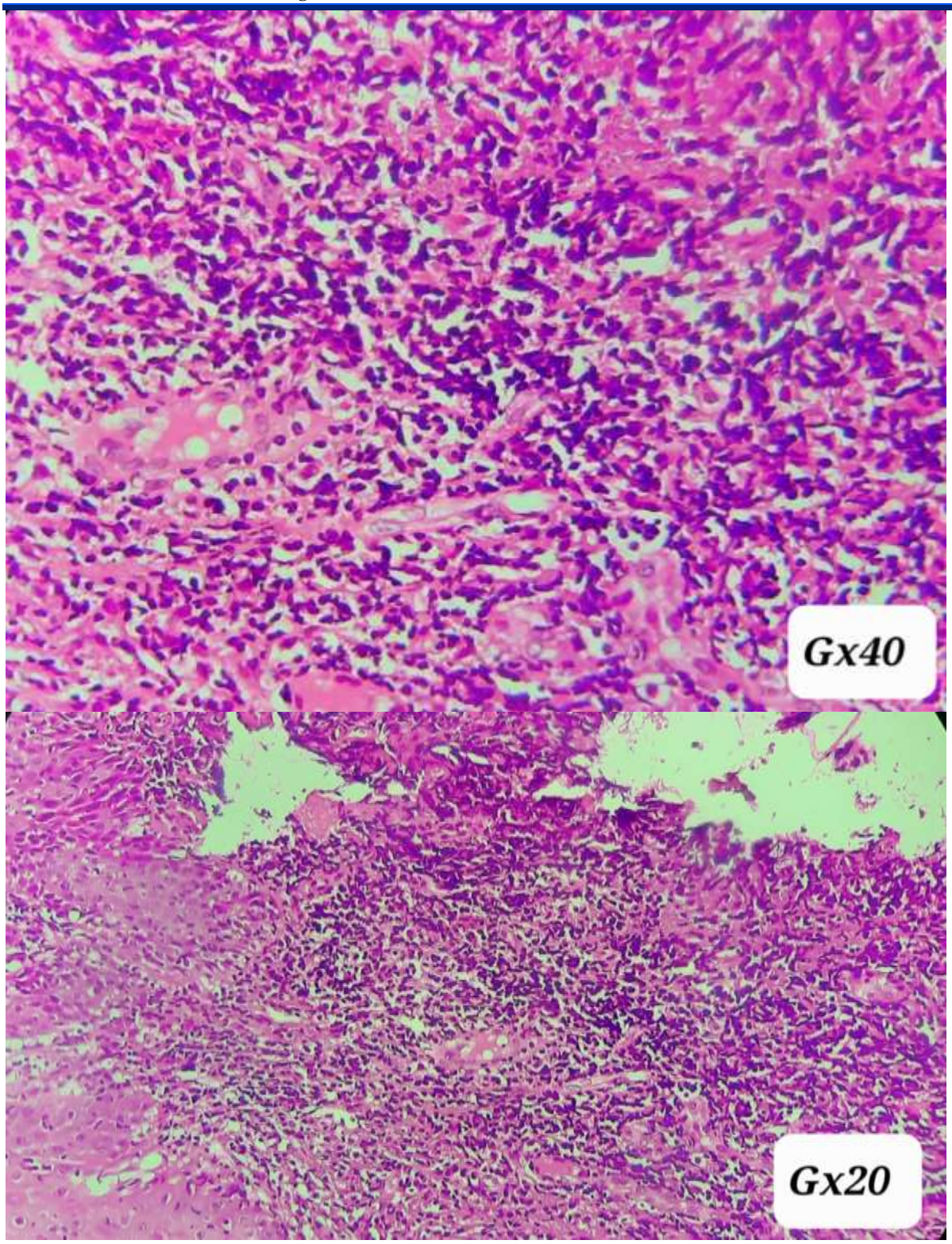

Figure 3: Morphological appearance and immunohistochemical profile in favor of peripheral T lymphoma.

Therapeutic intervention

After the results of the anatomopathological examination, which came back in favour of lymphoma, the biological work-up was normal, including the blood count, haemostasis and inflammatory markers.

A thoracic-abdominal-pelvic CT scan was performed, but the results were negative. The patient was referred to the oncology department, where she underwent chemotherapy and radiotherapy.

The patient received four sessions of CHOP-type chemotherapy at regular intervals, followed by radiotherapy delivering 40 Gy over 4 weeks, with 5 sessions of 2 Gy per week to the tumor site and satellite lymph nodes.

Follow-up and results of interventions:

- At the end of her treatment, the patient reported an improvement in her dysphonia and dyspnea. Her endoscopic check-up is scheduled in 3 months.

Discussion:

Laryngeal llymphoma represent almost 1% of all laryngeal tumors. Fewer than 100 cases have been reported in the literature. The mean age of onsmmmet is 60 years, with extremes ranging from 15 to 90 years. Data on the male/female sex ratio are contradictory [2-4]. The usual initial symptoms include dysphonia and dysphagia. Secondary symptoms include foreign-body sensation, stridor and general signs such as weight loss, night sweats and fever. Forms with respiratory distress are rare. These respiratory manifestations may lead to misdiagnosis, especially as early and indiscriminate corticosteroid therapy may contribute to the difficulty, Markou analyzed cases of primary LMNH of the larynx published between 1996 and 2008, 47% are located in the supraglottic region [5], 25% are glottic, the remainder are either subglottic or transglottic. Macroscopically, most lymphomas of the larynx present as a submucosal mass or polypoid tumor, they are smooth, non-ulcerated, and grayish-white. To confirm the diagnosis

Biopsies must be taken in depth to make a histological diagnosis. Immunohistochemistry is used to confirm the B (CD20, CD19, CD22, surface immunoglobulin positivity) or T (CD2, CD3 positivity) phenotype of the malignant cell. Cytogenetic analysis or molecular biology studies can complete the diagnostic workup. Based on the World Health Organization (WHO) classification of LMNH, Siddiqui has shown that type B accounts for 85%, while type T represents only 15%.B-cell LMNH are further classified as diffuse large, MALT, follicular and mantle, which have been observed in 50%, 20%, 10% and 5% of cases respectively [3]. The radiological work-up for laryngeal LMNH is that of a tumour of the VADS: a cervico-thoracic CT scan is initially requested. More specifically, an LDH blood test is performed. Computed tomography coupled with CT (PET-CT) shows consistent metabolic activity (100%) of lymphoma cells, which is generally uniformly enhanced with iodinated contrast (73%) without necrosis or calcification [3,6]. Historically, radiotherapy has been the main treatment modality for LMNH tumors. It achieves a prolonged complete response in 50% to over 90% of patients with LMNH. of localized stage I or stage II lymphoma, CHOP-based chemotherapy, depending on the histological type, plays an important role, particularly in low-grade lymphomas. Survival at 10-15 years is 50-60% [6].

Conclusion:

Primary laryngeal lymphomas are exceptional in location and may evolve silently. Respiratory symptomatology is usually the revelation of the disease. With these exceptional features, this is a diagnosis to be systematically evoked. It is also important to take deep biopsies and refer to the pathologist for the diagnosis of LMNH, to enable proper histological and immunohistochemical analysis. It seems that primary LMNH of the larynx is a presentation of lymphoma rather than a disease in its own right, and should be managed according to current trends in the treatment of lymph node LMNH [7].

Informed consent:

Written, dated and signed informed consent was obtained after the patient's full explanation.

Authors' contribution

All authors contributed to the patient's care and read and approved the final version of the manuscript.

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7.Lymphome malin non Hodgkinien primitif du larynx: à propos d'un cas

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