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Case Report

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Huge B-Cell Lymphoma of the Maxillary Sinus: Case Report and Review of the Litterature

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ABSTRACT

Primary non-Hodgkin's lymphoma (NHL) of Paranasal sinus is a rare entity with special characteristics; their locations in the air spaces of the face coming in second row.

The prognosis depends on tumor stage and extension into the paranasal sinuses

We related the case of a primitive NHL located in the maxillary sinus in a patient of 50 years, invading the entire homolateral nasal cavity.

The histopathologic interpretation was B cell lymphoma; the patient received 5 adjuvant chemotherapy treatments according to the CHOP protocol, followed by locoregional external radiotherapy and the evolution was favorable after eighteen months follow-up.

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List of abbreviations

NHLs: non-Hodgkin lymphomas

Introduction

Primary sinonasal extranodal non-Hodgkin lymphomas (NHLs) are rare. They account for about 0.17–2% of all cases of NHL, 6.4–13% of extranodal lymphomas of the head and neck and 5.8% of all malignant neoplasms of the sinonasal region in the adult [1]. There are two subgroups of lymphoma, B-cell and T/NK-cell, characterized by phenotype, location, prognosis, and treatment [2]. B-cell lymphomas are the more frequent type found in the paranasal sinuses and less aggressive with relatively better prognosis [2]. We report a case of primary NHL of the maxillary sinus enlarged in the nasal cavity, and the method of treatment used.

Case report

A 50-year-old man presented at our Department with nasal respiratory obstruction which had started 6 months previously and had steadily worsened. On inspection, no deformation was found on the face.

On endoscopic examination, there was a fleshy, budding polyploid formation filling the entire right nasal cavity, coming from the middle meat and pushing the middle horn and nasal septum to the left; this formation bled easily on contact.

On the left side, endoscopic examination does not reveal any abnormalities Endobuccal examination finds a toothless patient with no lesions or swelling in the palate On cervical palpation no palpable lymph nodes were noted On general examination, he was moderately built and nourished and was apparently healthy.

The computed tomography images demonstrated a heterogeneously enhanced lesional process occupying the entire right maxillary sinus and extending to the homolateral nasal cavity and reaching back to the nasopharynx pushing the septum to the left without bone lysis,with no anomalies at the base of the skull.(figure 1A,1B)

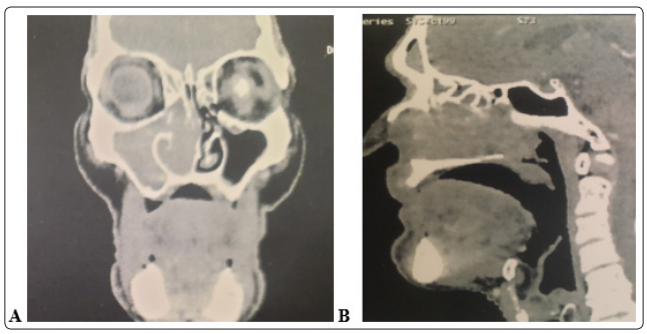

Figure 1: CT of the face (soft tissue window)

A: coronal view; a heterogeneously enhanced lesional process occupying the entire right maxillary sinus and extending to the homolateral nasal cavity

B: sagittal view; tumor extension back to the nasopharynx

A biopsy of the mass in the right nasal cavity was performed; anatomopathological examination shows the existence of a tumor formation manifestly malignant characterized by a diffuse cell web of large lymphomatous elements with blurred cytoplasmic boundaries; the nuclei are atypical increased in size with a vesicular chromatin. The immunohistochemical study shows that tumor infiltrate expresses CD20 with Ki67 estimated at 60%. CD3 was taken on small reactive T cells.CD5 is superimposed on CD3.CD10 was negative as well as MUM1.

Histopathological diagnosis was defined as diffuse large B cell lymphoma of maxillary sinus.

Once the diagnosis of lymphoma was retained, an extension check-up was carried out with normal biological examinations, a negative sternal puncture and a chest-abdominal scan that did not reveal any other locations.

Based on the results, the disease was staged as Ann Arbor IE, the patient received 5 cycles of adjuvant chemotherapy according to the protocol CHOP (adriamycin + vincristine + cyclophosphamide + prednisone), followed by external radiotherapy locoregionale sinus and nasal cavities) at the dose of 48,6 Gy in 27 seances. Eighteen months after completion of treatment the patient is in complete remission and free of locoregional and distant evidence of disease.

Discussion

Primary paranasal sinus non-Hodgkin lymphoma (NHL) is rarely seen in clinical practice, accounting for less than 0.5-1.5% of B-cell lymphomas [3].

These lymphomas occur with predilection during the sixth decade of life, with a slight predominance of masculine [4].

If general signs are rare, Local signs are mainly represented by an obstruction nasal often old, more rarely rhinorrhea or recurrent epistaxis [5].

However, maxillary sinus involvement is rare and Published literature indicates that the posterior part of the maxillary sinus is the most common site when NHL is in the paranasal sinuses. [6] The average age of patients with maxillary lymphoma at diagnosis is 50 to 55 years, with a predominance of men and a sex ratio of 3: 2 [7].

Among the differential diagnoses, mucoceles are the most frequent. The differential diagnosis also includes etiologies infectious (acute and chronic sinusitis), the inflammatory polyp antrochoanal and tumors (benign, malignant and metastatic) [8].

Each type has a different clinical presentation, as a result of genetic alterations and underlying oncogenic mechanisms. Most tumors of the maxillary lymph gland are very malignant diffuse large cell tumors [9].

The initial treatment for nasal lymphoma sinus infection is mainly based on radiotherapy . The place of surgery in the management of these lymphomas has never has been validated in terms of tumor control or survival. The indications for adjuvant chemotherapy from the outset are still discussed . Regarding the therapeutic attitude, it is still a source of controversy. Not all teams have the same attitude for stages I [10, 11]. Indeed, some teams continue to offer radiotherapy alone for stage I since the response to treatment is complete in 95 to 100% of case [10]. Overall 5-year survival is 30-60% in stages I-II and drops to 30% for more advanced stages.

Conclusion

Nasosinus lymphomas are a rare entity characterized by by an initial symptomatology often crude, delaying the diagnosis. Radiology is nonspecific, and the diagnosis histological remains. Chemotherapy adjuvant to radiotherapy gives good results.

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