

Enlarging Premaxillary Mass: A Unique Manifestation of Extranodal Diffuse B-Cell Lymphoma

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Background

- Lymphomas are the third most common malignancy in the head and neck, constituting 5-12% of all such malignancies [1,4].
- Non-Hodgkin lymphoma (NHL) accounts for the majority of head and neck lymphomas, with diffuse B-cell lymphoma as the most prevalent histologic subtype [4].
- Extranodal involvement occurs in 25-30% of head and neck NHL cases [3,4].
- Waldeyer's ring (i.e. tonsils) is the most frequent site of extranodal involvement in the head and neck; however, virtually any anatomical location can be affected [1, 2].

Clinical History

- 40-year-old male presented with an enlarging right facial mass with associated erythema, pain, and facial paresthesias.
- Initially diagnosed with a soft tissue infection, he returned to the emergency department 1 week later with worsening symptoms despite antibiotic therapy.
- CT maxillofacial was performed and he was admitted for further evaluation.

Imaging

Axial CT maxillofacial with IV contrast in soft tissue window (a) and bone window (b) showing right premaxillary soft tissue density mass without significant adjacent inflammatory changes or sinus disease.

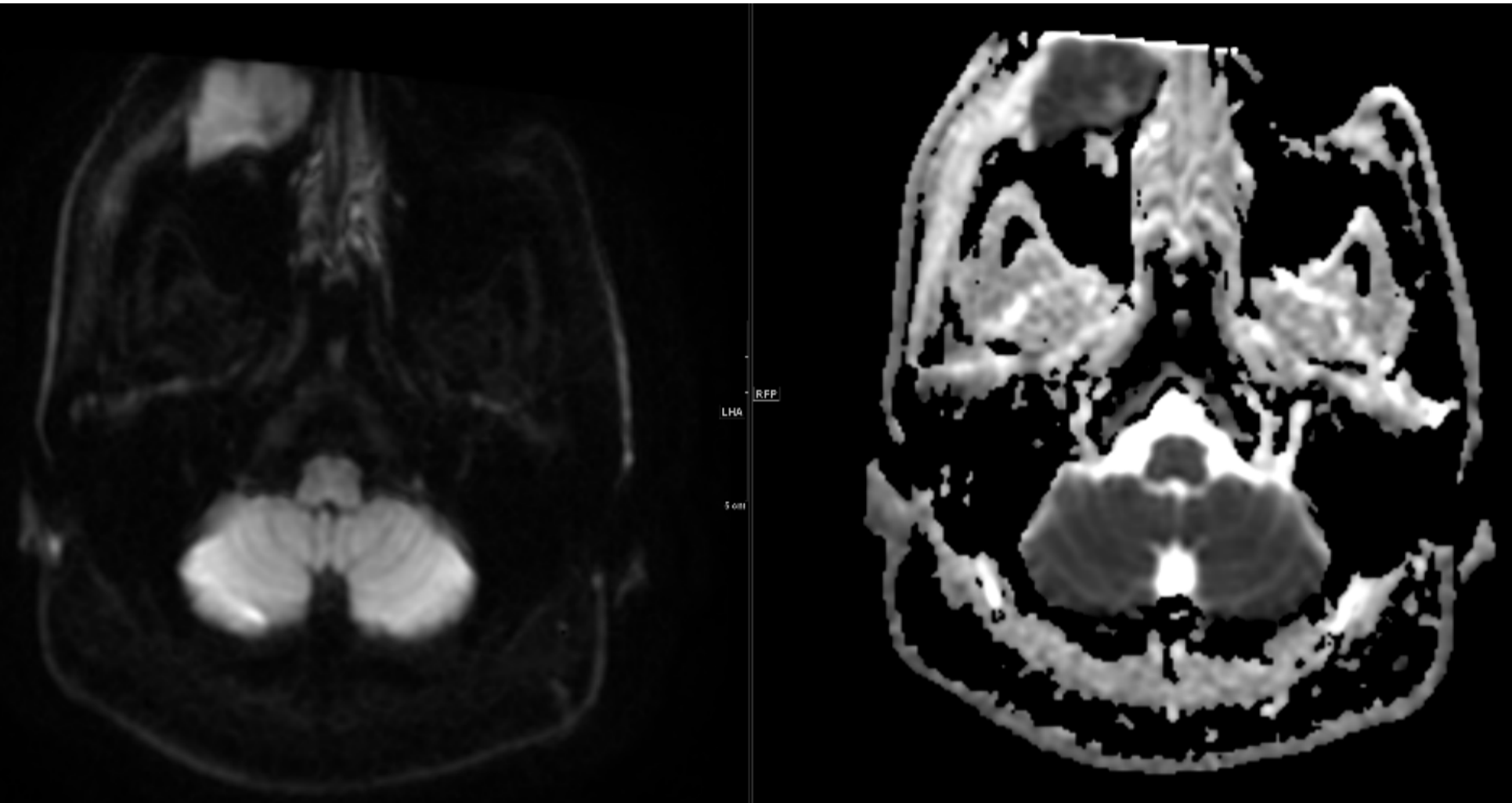


Imaging (cont.)

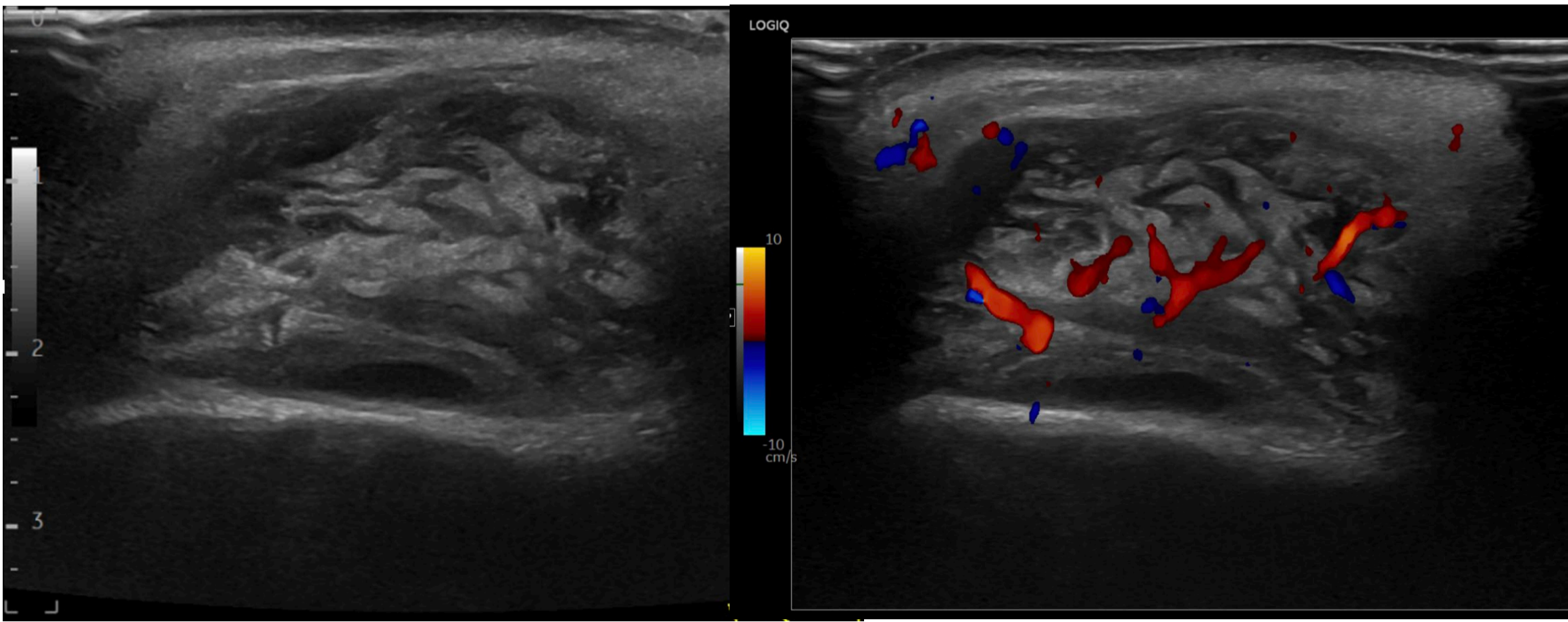
- Coronal CT maxillofacial with IV contrast with asymmetric dilatation of the right infraorbital foramen.



- MRI brain with DWI (left) and ADC (right) demonstrating diffusion restriction of a right premaxillary soft tissue mass.



- Greyscale and doppler images shows heterogenous, vascular infraorbital mass.



Pathology

- Fine needle aspiration was performed and demonstrated atypical lymphoid cells with hyperchromatic nucleoli, scant cytoplasm, and immunohistochemical profile consistent with a non-germinal center b-cell-like subtype of **diffuse large B-cell lymphoma (DLBCL)**.

Teaching points

- Our case highlights a unique premaxillary location of extranodal NHL with perineural spread along the infraorbital nerve.
- NHL can be seen at nearly any site in the head and neck, including extranodal and extra-lymphoid locations.
- Increased signal on DWI and lack of necrosis can help differentiate lymphoma from other malignancies in the head and neck.
- Perineural spread is common in head and neck malignancies, including lymphoma.

References

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