Original Contributions

Diagnostic Challenge
Lip mass

Rana Alshagroud, BDS, MS; Hazar Alharbi, BDS; Jolly Caplash, DMD; Mihai Merzianu, MD; Alfredo Aguirre, DDS, MS

THE CHALLENGE

A 54-year-old man was referred to an oral surgeon for the evaluation of a mass in his lip. The patient indicated that the lesion had been present "for some time" and was growing slowly. His medical history was only significant for penicillin allergy. No history of trauma to the area was reported. Head and neck examination was noncontributory. Intraoral examination revealed the presence of a nodular lesion in the lower left lip covered by intact mucosa. The mass measured approximately 0.6 centimeters across, was nontender, and displayed a firm consistency (Figure 1). The clinical impression was fibrosed mucocele. An excisional biopsy under local anesthesia was performed, and the specimen was submitted for histologic evaluation. Microscopic examination revealed a well-circumscribed cellular nodule demonstrating sheets and closely packed irregular nests and bands with a vague storiform pattern of oval to polygonal cells with oval to irregularly shaped nuclei and scant cytoplasm with indistinct cytoplasmic borders (Figures 2 and 3). Foamy macrophages and multinucleated cells were noted. Mitotic figures (6 per 10 high-power

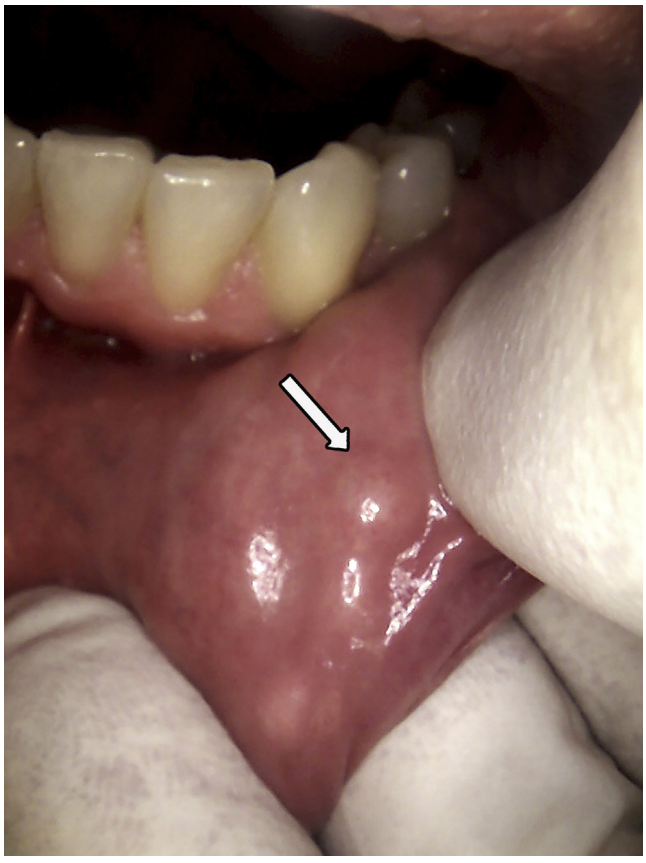

Figure 1. Intact labial oral mucosa with a small nodularity (arrow).

(Please see next page for additional images.)

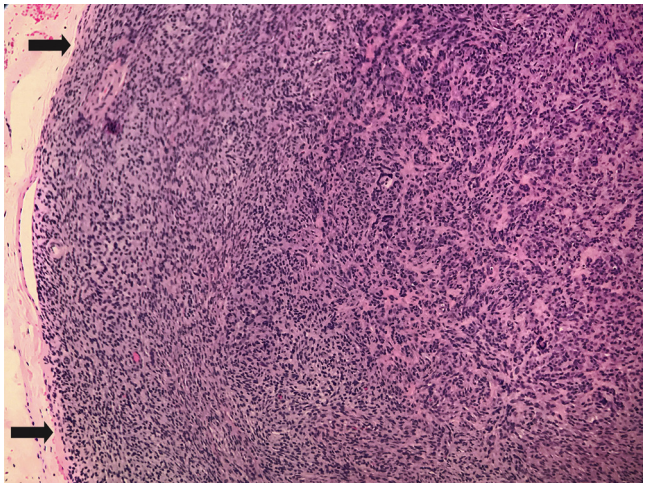

Figure 2. Low-powered view showing a circumscribed cellular proliferation arranged in intersecting bundles. The arrows point out the circumscription of the tumor cells (hematoxylin-eosin, original magnification x40).

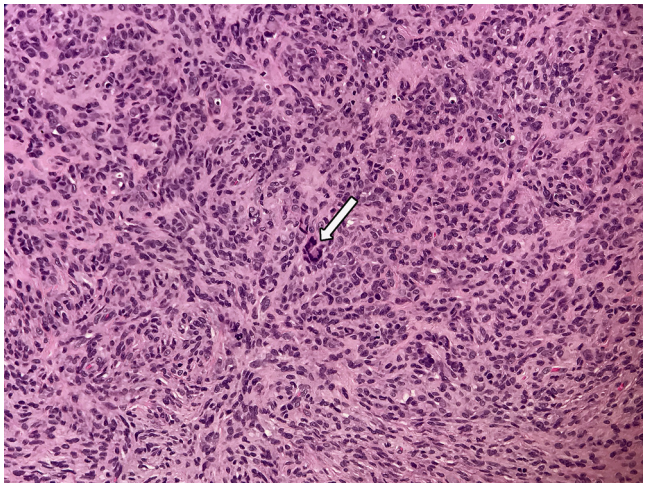

Figure 3. Medium-powered view showing a proliferation of ovoid to polygonal mesenchymal cells with vague storiform regimentation and an interspersed Touton like multinucleated giant cell (arrow) (hematoxylin-eosin, original magnification x200).

field), some atypical, were identified. Immunohistochemical studies demonstrated lesional cells to be consistently positive to histiocytic markers (cluster of differentiation [CD]68 and CD163; Figure 4) and CD4 (often expressed in histiodendritic neoplasms).[1] ALK-1, lysozyme, dendritic markers (factor XIIIa, CD21), and myoid markers (desmin, smooth muscle actin) were negative.

Can you make the diagnosis?

A. fibrous hyperplasia (irritation fibroma)
B. oral mucocele (organizing or fibrosed)
C. schwannoma
D. pleomorphic adenoma
E. fibrous histiocytoma