

KNOW YOUR FIELD

Ameloblastic carcinoma: Sometimes a challenge

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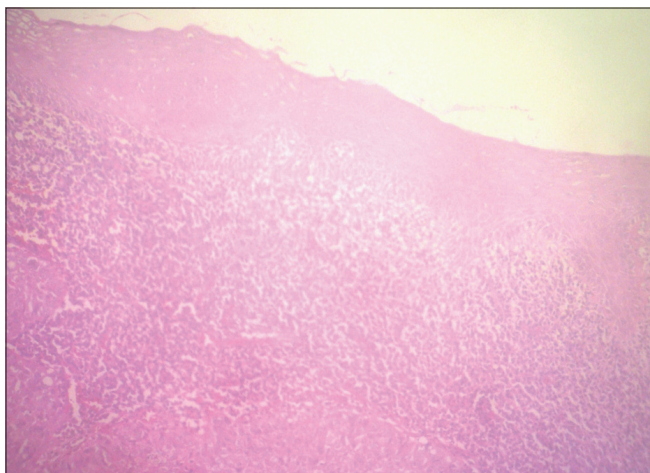


Figure 1: Section showing ulcerated mucosa, lymphocytic infiltration, and tall columnar cells (H and E, $\times 4$)

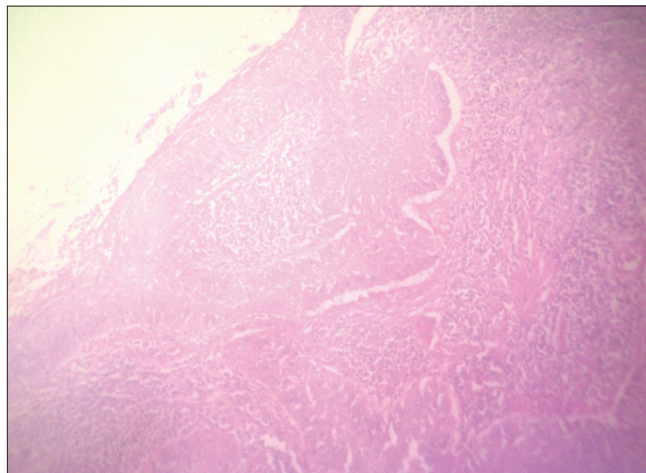


Figure 2: Section showing ulcerated mucosa, lymphocytic infiltration, and tall columnar cells (H and E, $\times 4$)

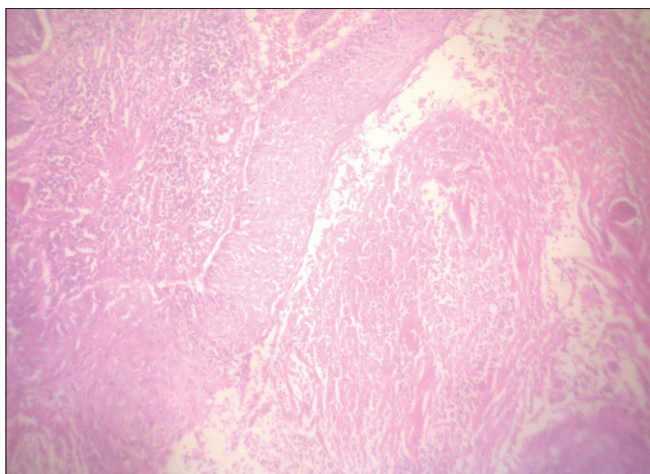


Figure 3: Sections showing keratotic debris and islands of tall columnar cells with pleomorphism (H and E, $\times 10$)

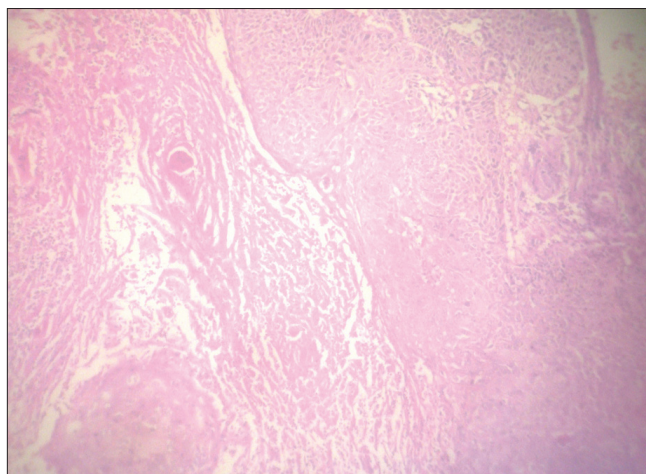


Figure 4: Sections showing keratotic debris and islands of tall columnar cells with pleomorphism (H and E, $\times 10$)

A 60-year-old male reported with pain and extraoral swelling in the left lower third of the face. Clinically, a 2 cm \times 2 cm bony hard swelling was seen extending up

to the left angle of the mandible. The swelling was tender on palpation, with no signs of parasthesia. Intraorally, the ulcer was 1 cm \times 3 cm in size and showed white slough and an indurated border. Radiographically, a diffuse radiolucency was seen.

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HISTOPATHOLOGY

- Ulcerated mucosal surface with acute inflammation is seen, along with pleomorphic epithelial cells irregularly arranged in cords and nests [Figures 1 and 2].

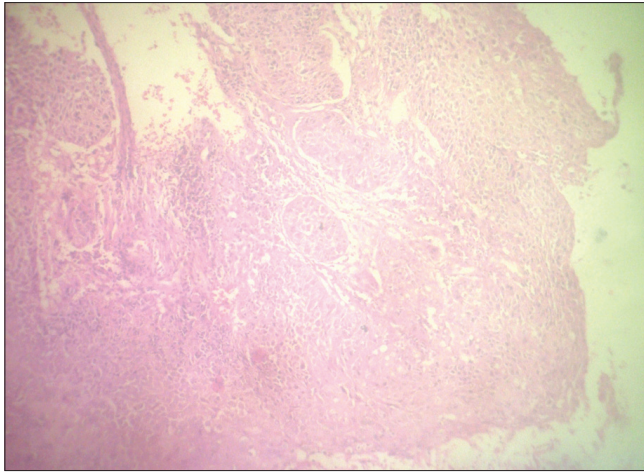


Figure 5: Sections showing keratotic debris and islands of tall columnar cells with pleomorphism (H and E, $\times 10$)

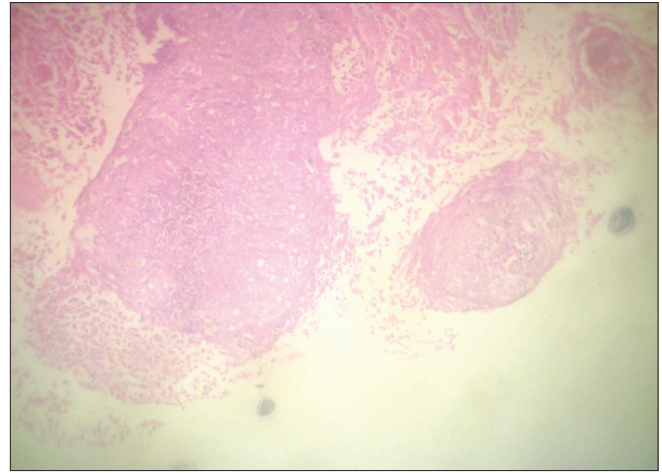


Figure 6: Sections showing keratotic debris and islands of tall columnar cells with pleomorphism (H and E, $\times 10$)

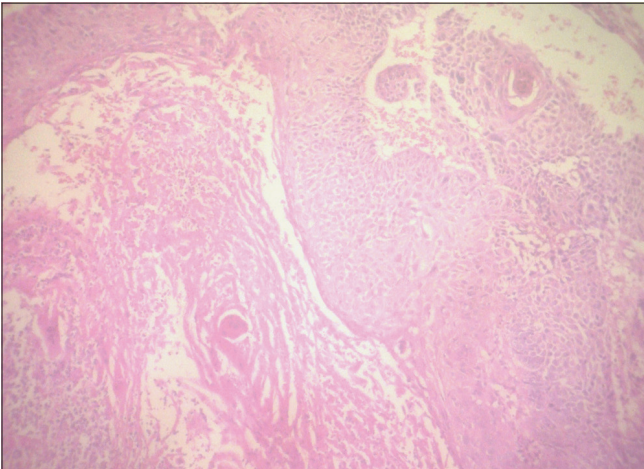


Figure 7: Sections showing keratotic debris and islands of tall columnar cells with pleomorphism (H and E, $\times 10$)

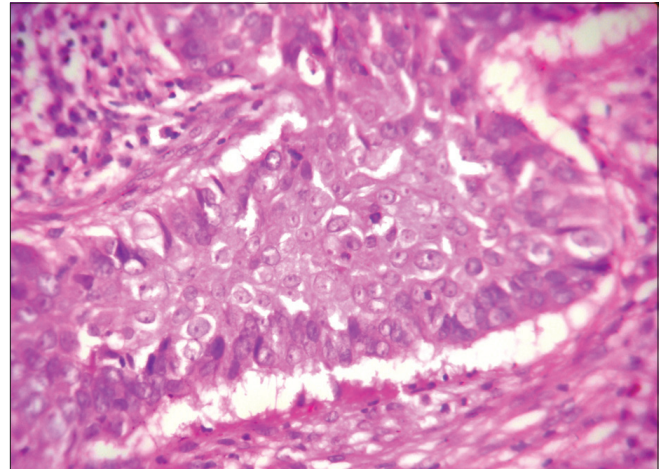


Figure 8: Sections showing islands of tall columnar cells with pleomorphism, nuclear atypia, and mitotic activity; the intervening stroma is vascular (H and E, $\times 40$)

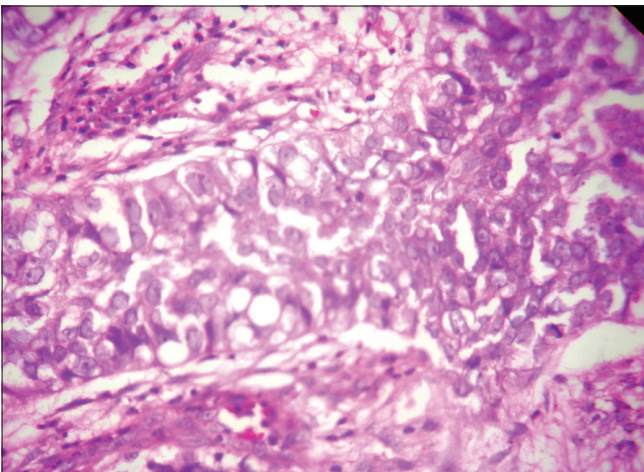


Figure 9: Sections showing islands of tall columnar cells with pleomorphism, nuclear atypia, and mitotic activity; the intervening stroma is vascular (H and E, $\times 40$)

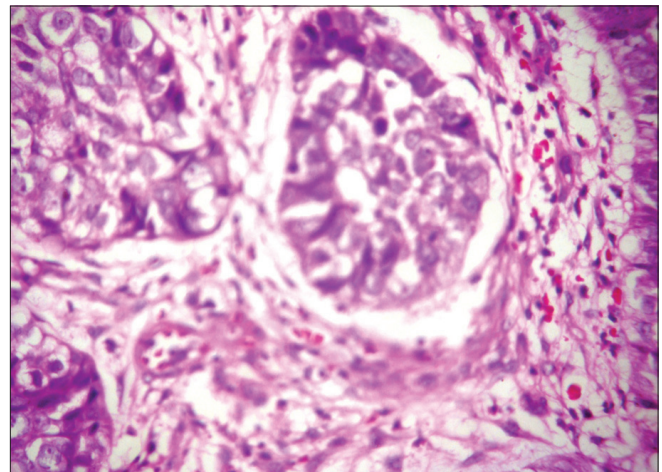


Figure 10: Sections showing islands of tall columnar cells with pleomorphism, nuclear atypia, and mitotic activity; the intervening stroma is vascular (H and E, $\times 40$)

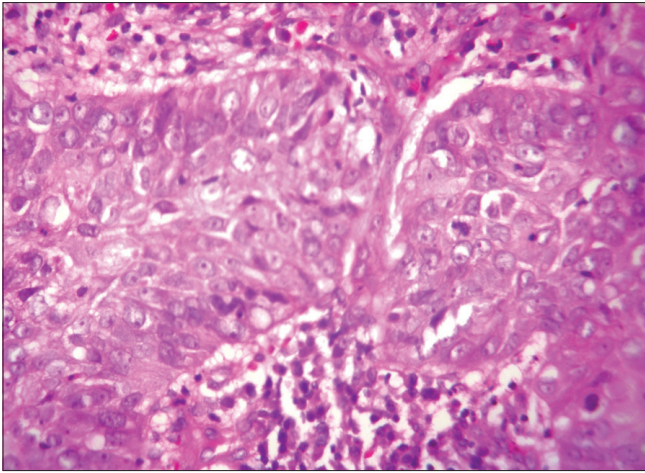


Figure 11: Sections showing islands of tall columnar cells with pleomorphism, nuclear atypia, and mitotic activity; the intervening stroma is vascular (H and E, ×40)

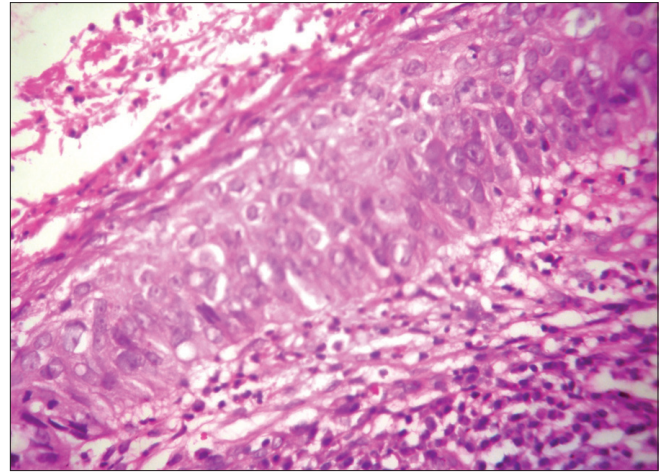


Figure 12: Sections showing islands of tall columnar cells with pleomorphism, nuclear atypia, and mitotic activity; the intervening stroma is vascular (H and E, ×40)

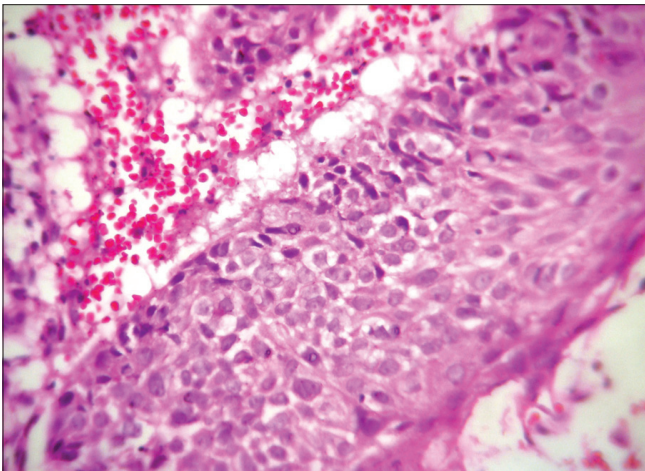


Figure 13: Sections showing islands of tall columnar cells with pleomorphism, nuclear atypia, and mitotic activity; the intervening stroma is vascular (H and E, ×40)

- Moderate acute inflammation with keratotic debris is seen in the islands lined by tall columnar cells showing nuclear atypia and mitotic activity [Figures 3–7].

- Intervening stroma is vascular and shows dense lymphocytic infiltration.
- The islands of tall columnar cells show a high degree of pleomorphism and mitotic activity; the intervening stroma is vascular [Figures 8–13].

DIFFERENTIAL DIAGNOSIS

Conventional ameloblastoma does not show the same intensity of pleomorphism, whereas squamous differentiation in ameloblastoma resembling keratotic debris might be confused with squamous cell carcinoma.

FINAL DIAGNOSIS

The histopathological features are suggestive of ameloblastic carcinoma.

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