

Hyalinizing clear cell carcinoma of the tonsil: Case report

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Abstract

Aim: To report a rare case of tonsillar clear cell carcinoma (CCC), its clinical presentation, its imaging features, its pathological particularities, and its surgical management.

Methods: We studied the case of a 69-year-old male presenting a locally extended tonsillar CCC.

Observation: A 69-year-old male without prior history of cancer presented with an initially neglected complaint of odynophagia. Physical examination noted an ulcerating 7-centimeter mass centered on the left palatine tonsil, extending to the anterior pillar and soft palate, grazing the base of the tongue without invading it, with bleeding on contact. Cervical examination did not reveal any lymph node enlargement. Panendoscopy under general anesthesia revealed no involvement of the base of the tongue, hypopharynx, or larynx. Biopsy concluded to a clear cell carcinoma. Magnetic resonance imaging and computed tomography scan allowed a thorough study of the invasive mass and revealed lysis of the mandibular bone, without other secondary locations elsewhere, particularly in the kidneys. The tumor was staged T4aN0M0, and the patient underwent segmental transmandibular bucco-pharyngectomy with bilateral functional neck dissection. The defect was covered by pectoralis major flap. Postoperative course was uneventful. An adjuvant radiation therapy is advocated.

Conclusion: Primitive tonsillar localization of CCC is uncommon. It is usually reported as metastasis of an already evolving renal CCC. Surgical resection is the base of the treatment and radiation therapy is reserved for tumors with aggressive features or positive margins.

Aim

To report a rare case of tonsillar clear cell carcinoma (CCC), its clinical presentation, its imaging features, its pathological particularities, and its surgical management.

Methods

We studied the case of a 69-year-old male presenting a locally extended tonsillar CCC.

Case report

69-year-old male with no prior cancer history presented with odynophagia.

Physical exam revealed a 7-cm ulcerating mass on the left palatine tonsil. (Figure 1)

Mass extended to the anterior pillar and soft palate, bleeding on contact.

No lymph node enlargement was noted on cervical examination.

Panendoscopy showed no involvement of the base of the tongue, hypopharynx, or larynx.

Biopsy confirmed clear cell carcinoma.

MRI: Locally advanced tissue process of the left lateral wall of the oropharynx centered on the left palatine tonsil (Figure 2)

CT: Tumor thickening of the anterolateral wall of the left oropharynx coming into contact with the mandibular bone with bone lysis (Figure 3)

Tumor staged as T4aN0M0. Particularly no renal tumor.

Patient underwent segmental transmandibular bucco-pharyngectomy and bilateral neck dissection. (Figure 4)

Defect was covered with pectoralis major flap. (Figure 5)

Pathology: moderately differentiated, non-keratinizing squamous cell carcinoma with a clear-cytoplasmic contingent, **HPV - / P40 + / P16 at 40%**. pN0

Adjuvant radiation therapy is advocated.



Figure2: T2 coronal MRI: Locally advanced tissue process of the left lateral wall of the oropharynx



Figure3: Axial CT showing heterogeneous mass of the left tonsil with mandibular bone lysis

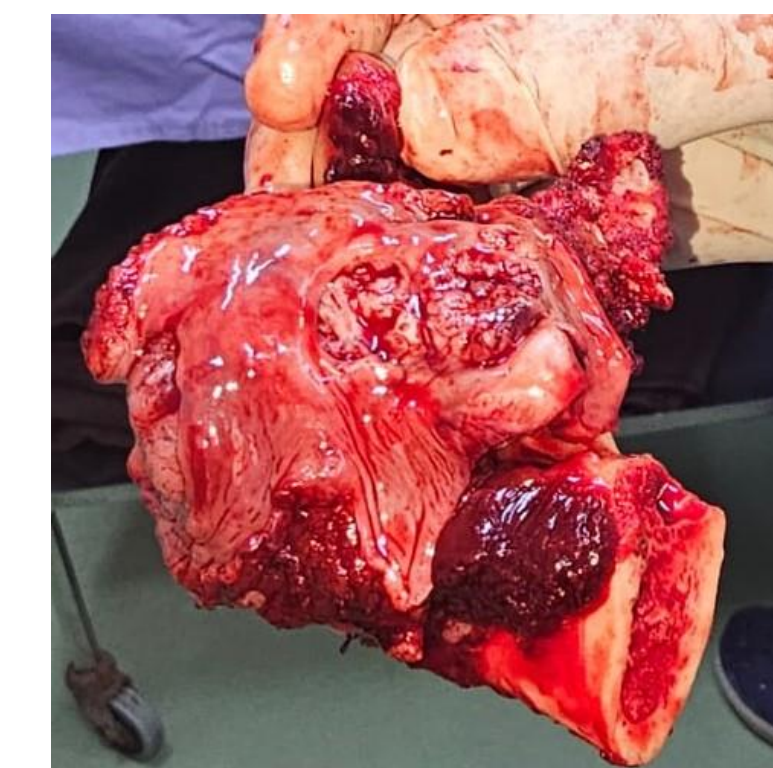


Figure4: Surgical specimen after left trans-mandibular bucco-pharyngectomy



Figure5: 1-month post-operative aspect of pectoralis major flap reconstruction

Conclusion

Clear cell carcinoma (CCC) is predominantly known for its renal origins, where it exhibits characteristic clear cytoplasm due to glycogen or lipid content. [1] Its appearance in the tonsil is extraordinarily rare but should be considered in differential diagnoses of atypical tonsillar lesions. [2] Histopathological features of CCC, including its distinct clear cell morphology, are crucial for diagnosis. When CCC is found in the tonsil, it often necessitates a thorough evaluation for a potential renal primary, given the high likelihood of metastatic spread from the kidney. [3]

References

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