

Parotid acinic cell carcinoma

Bronson Yaldoo, DO, and Mohamed Jaber, MD

CASE SUMMARY

A 26-year-old Caucasian woman presented to the hospital with clinical concern for a parotid abscess. The patient reported that she had right facial swelling for years, which had recently worsened. Neck CT with intravenous contrast was then performed, which demonstrated a right parotid mass. No abscess was present. Ultrasound-guided biopsy was then performed, yielding a diagnosis of parotid acinic cell carcinoma.

IMAGING FINDINGS

Contrast-enhanced CT demonstrated the presence of a well-circumscribed, lobulated enhancing mass within the superficial right parotid gland. The mass is relatively homogeneous with some cystic components (Figure 1).

DIAGNOSIS

Parotid acinic cell carcinoma

DISCUSSION

Acinic cell carcinoma is an indolent, low-grade malignant parotid tumor.¹ Overall, it is the third-most common malignant tumor of the parotid gland. Acinic cell carcinoma occurs more commonly in the parotid gland compared to other salivary glands. Patients are generally younger

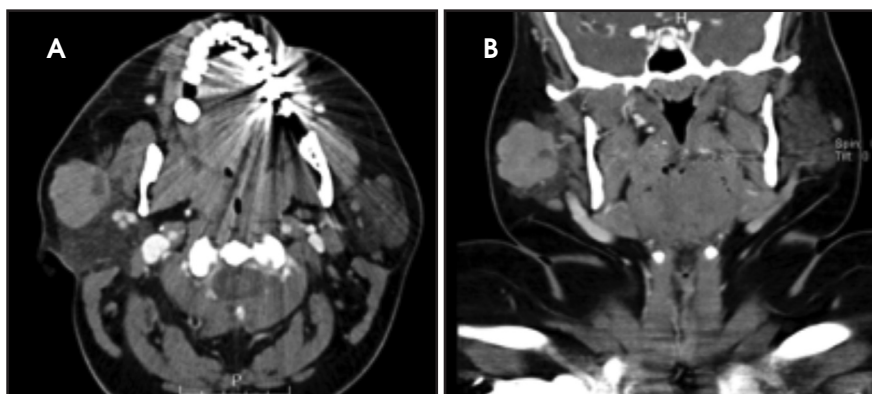


FIGURE 1. (A) Axial CT neck with IV contrast demonstrates right parotid mass. (B) The mass is again demonstrated in the coronal plane.

compared to those with other parotid malignancies. Although it has a favorable prognosis, recurrence and metastatic disease can occur several years after treatment. On CT imaging the tumor is lobulated and homogeneous. Cysts, necrosis and hemorrhage can be present. Calcifications are uncommon. MR imaging typically demonstrates T2 hyperintense signal. All in all, acinic cell carcinoma cannot reliably be differentiated from other parotid gland tumors.² Treatment is surgical excision with or without radiation.³

CONCLUSION

Parotid acinic cell carcinoma is a rare, slow-growing, malignant tumor with imaging findings indistinguishable from other parotid tumors. It is the

third-most common malignant tumor of the parotid gland.

REFERENCES

1. Al-Zaher N et al: Acinic cell carcinoma of the salivary glands: a literature review. *Hematol Oncol Stem Cell Ther.* 2009; 2(1):259-264.
2. Li J et al: Ultrasound and computed tomography features of primary acinic cell carcinoma in the parotid gland: a retrospective study. *Eur J Radiol.* 2014; 83(7):1152-1156.
3. Lima RA et al: Clinical prognostic factors in malignant parotid gland tumors. *Otolaryngol Head Neck Surg.* 2005; 133(5):702-708.

Prepared by Dr. Yaldoo while a Diagnostic Radiology Resident, and Dr. Jaber while an Interventional Radiologist, at McLaren Oakland Hospital in Pontiac, MI.