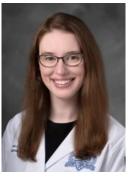
Plasmacytoma of the Cricoid and Thyroid Cartilage: A Rare Location of an Uncommon Tumor

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**Introduction:** Plasmacytoma is a discrete solitary mass of monoclonal neoplastic plasma cells that may arise from medullary or extramedullary sites. Extramedullary plasmacytoma (EMP) is more commonly found in the head and neck; however, EMP of the larynx is extremely rare. EMP accounts for less than 4% of plasma cell tumors. Head and neck imaging is important in identifying and diagnosing lesions via CT and/or MRI, as well as for image-guided biopsy. Patients can then be treated with a combination of radiation and chemotherapy. Our two cases illustrate this uncommon pathology located in the cricoid and thyroid cartilage, respectively, with Case 2 also demonstrating solitary skeletal involvement of the C2 vertebral body.

## **Case Presentations:**

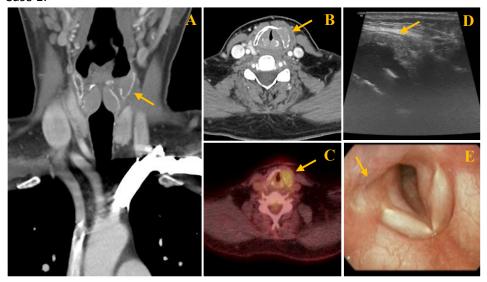
Case 1: 50-year-old female presents to our facility with enlarging left-sided neck mass. CT neck images (A, B) demonstrate expansile and lytic lesions within the cricoid and left thyroid cartilage without FDG uptake on PET-CT (C). After imaging and endoscopy (E), the patient underwent ultrasound-guided biopsy of the cricoid mass (D). She was diagnosed with plasmacytoma with plasma cell dyscrasia that improved with chemotherapy.

Case 2: 85-year-old male presents to outside facility for a fall with imaging notable for lytic and expansile lesions in the right thyroid cartilage on T1-weighted MRI (A) and CT (B) images, and of the C2 vertebral body on CT images (C). At our facility, uptake is seen on respective PET-CT images (C, E). Then, CT-guided biopsy of the thyroid cartilage lesion and transoral biopsy of the C2 lesion were obtained (F, G), in addition to endoscopy (H). The patient was diagnosed with plasmacytoma without plasma cell dyscrasia.

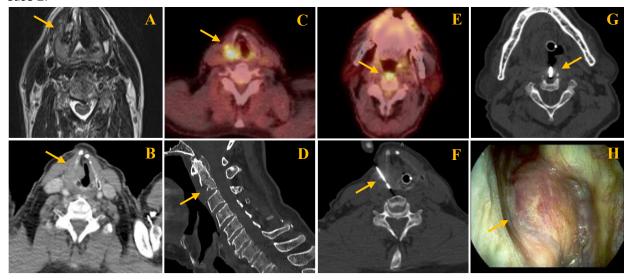
**Conclusion:** Extramedullary plasmacytoma (EMP) is a rare form of plasmacytoma that is found in the head and neck. While classic imaging characteristics have not been well-defined given the rarity of EMP, it is an important consideration for radiologists when providing differential diagnoses of head and neck lesions.

## **Case Figures:**

Case 1:



Case 2:



## **References:**

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