

Thyroglossal Duct Cyst: Uncommon Presentation in an Adult

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Introduction

- Thyroglossal duct cysts are the most common form of congenital cysts in the neck. About 50% of cases are detected before age twenty and 15% of cases are diagnosed after age 50.
- Patients typically present with a cystic upper neck mass that is asymptomatic or slightly tender. Thyroglossal duct cysts typically move upward with protrusion of the tongue or swallowing and are usually within two centimeters of the midline, but can be found more lateral.

Case Report

- A 45 year old male presented to the family medicine clinic complaining of a painless mass on his neck that he first noticed one month ago. He was otherwise asymptomatic. Denied any similar masses elsewhere on his body. He has a PMHx of hypertension, obstructive sleep apnea, and atrial fibrillation. He is a former one pack per day smoker for fifteen years, quit five years ago.
- On presentation, patient was afebrile, T 98° F, BP 130/76, P 93, RR 20, SpO2 97% on RA. On examination, patient had a nontender soft mobile mass of six centimeters in diameter on his anterior neck slightly right of midline. The mass moved with protrusion of the tongue and swallowing. Thyroid studies and an ultrasound and CT with contrast of the neck were performed.
- Thyroid studies including TSH and free T4 were unremarkable. Ultrasound showed a complex cystic structure over the anterior neck. CT showed a complex cystic lesion anterior to the hyoid bone measuring 3.8 x 3.3 cm suspicious for thyroglossal duct cyst.
- Patient was referred to otolaryngology for further evaluation and possible Sistrunk procedure.

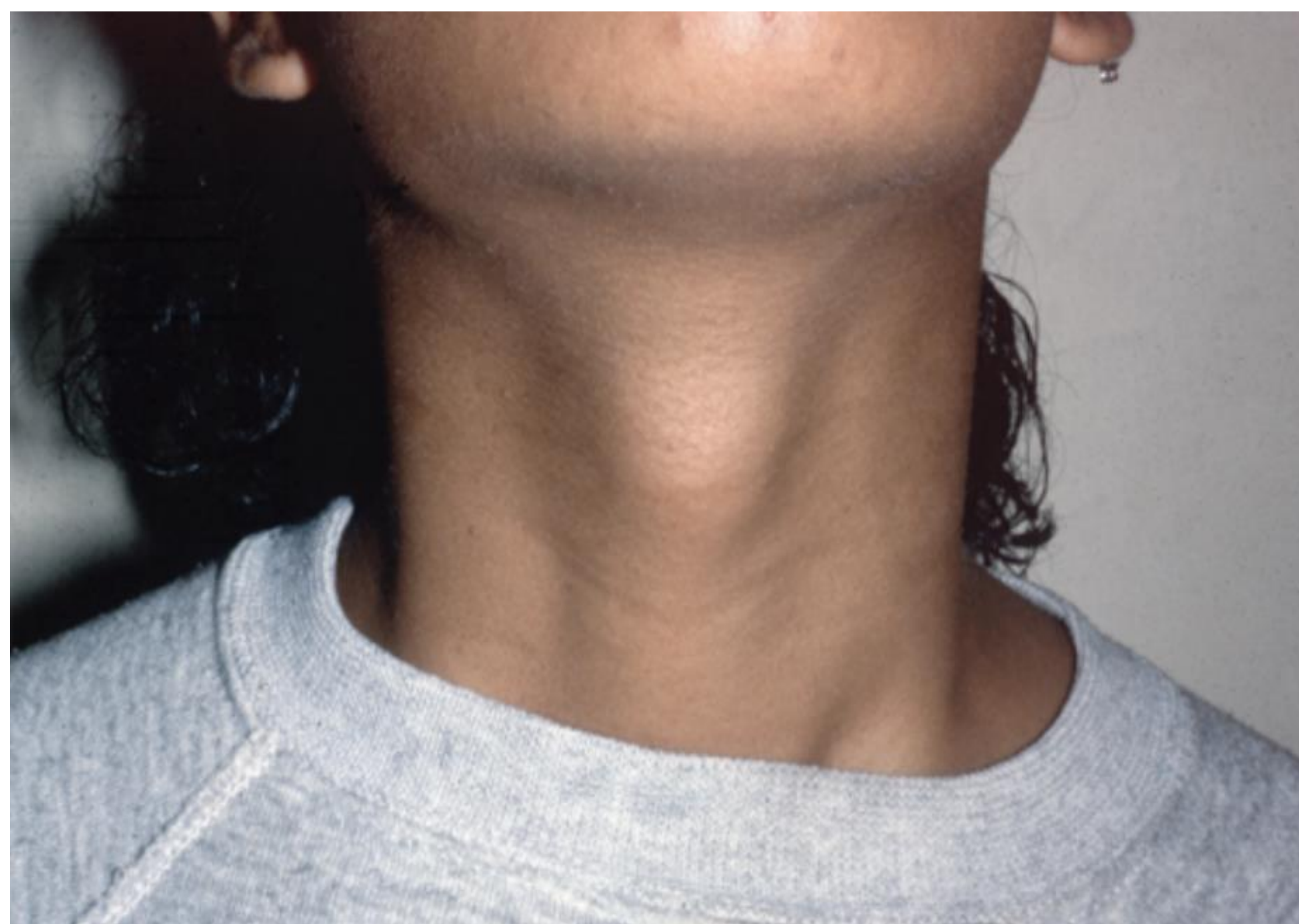
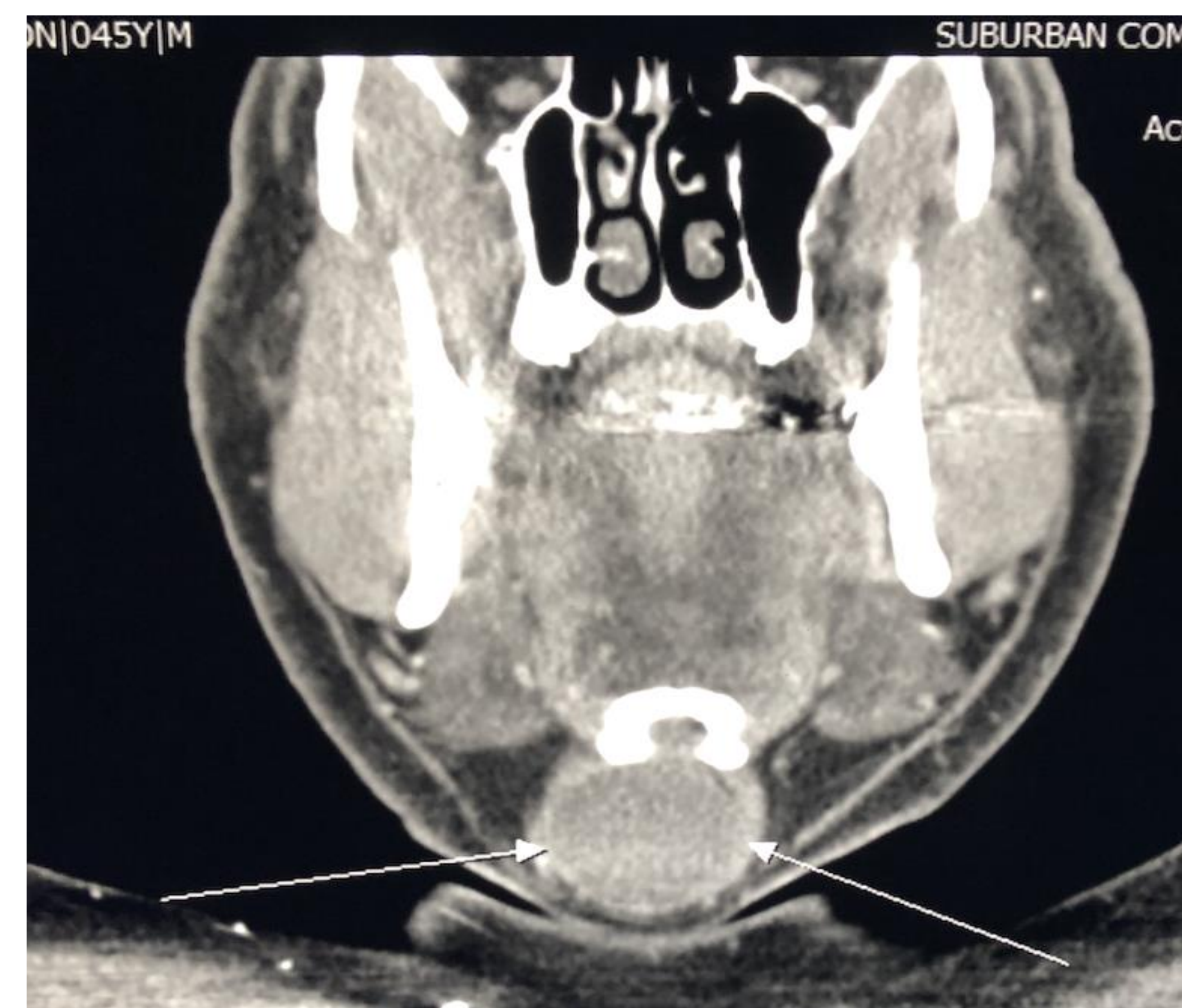
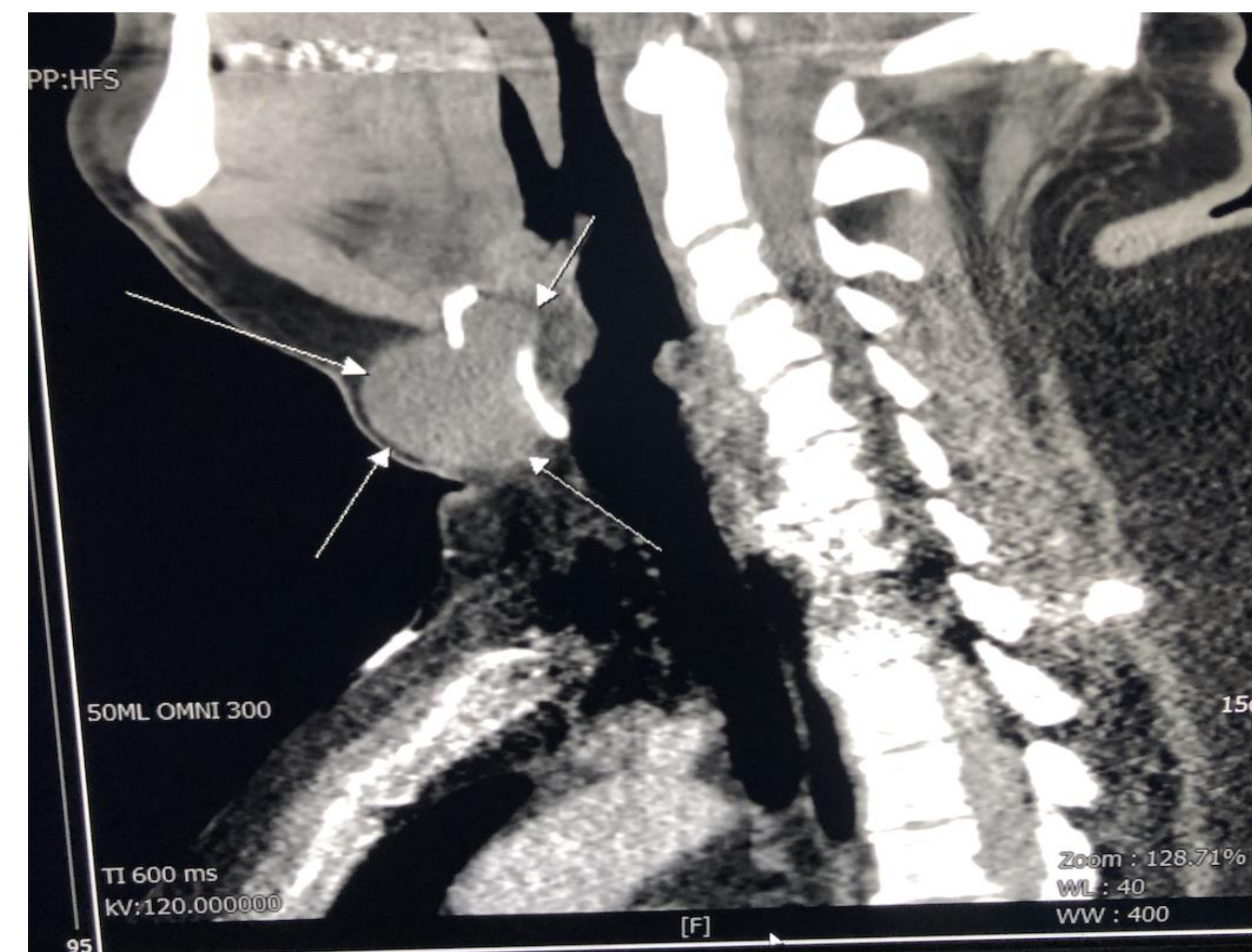


Image from the Atlas of Emergency Medicine showing similar presentation of thyroglossal duct cyst as seen in our patient.

Imaging

Images of CT Soft Tissue Neck with contrast showing 3.8 x 3.3 cm complex cystic lesion anterior to the hyoid:



Discussion

- The differential diagnosis for thyroglossal duct cyst includes thyroid malignancy, multinodular goiter, dermoid cyst, lymphadenopathy, and lipoma.
- CT of the neck with contrast is the best imaging modality to confirm diagnosis of thyroglossal duct cyst by showing the close relationship of the cyst with the hyoid bone and by giving additional information about the size, extent, and location.
- Thyroglossal duct cysts should be treated with the Sistrunk procedure, which involves resection of the cyst and the midportion of the hyoid bone along with the surrounding tissue of the thyroglossal tract. Recurrence after a Sistrunk procedure is rare.
- If a thyroglossal duct cyst is not removed, as many as one half become infected. Infection of the cyst before surgery increases likelihood of recurrence.

Conclusion

- While thyroglossal duct cysts are a common lesion of the neck in pediatrics, they are less common in adult patients. In adults, thyroglossal duct cysts are typically larger and are more likely to become infected. Thyroglossal duct cysts are an important differential in adults who present with a large neck mass. Removal is often required with a Sistrunk procedure.

References

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Patient Care Team

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