

## AN OBSTRUCTING LARYNGOCELE - A RARE CASE OF ACUTE UPPER AIRWAY OBSTRUCTION

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### INTRODUCTION

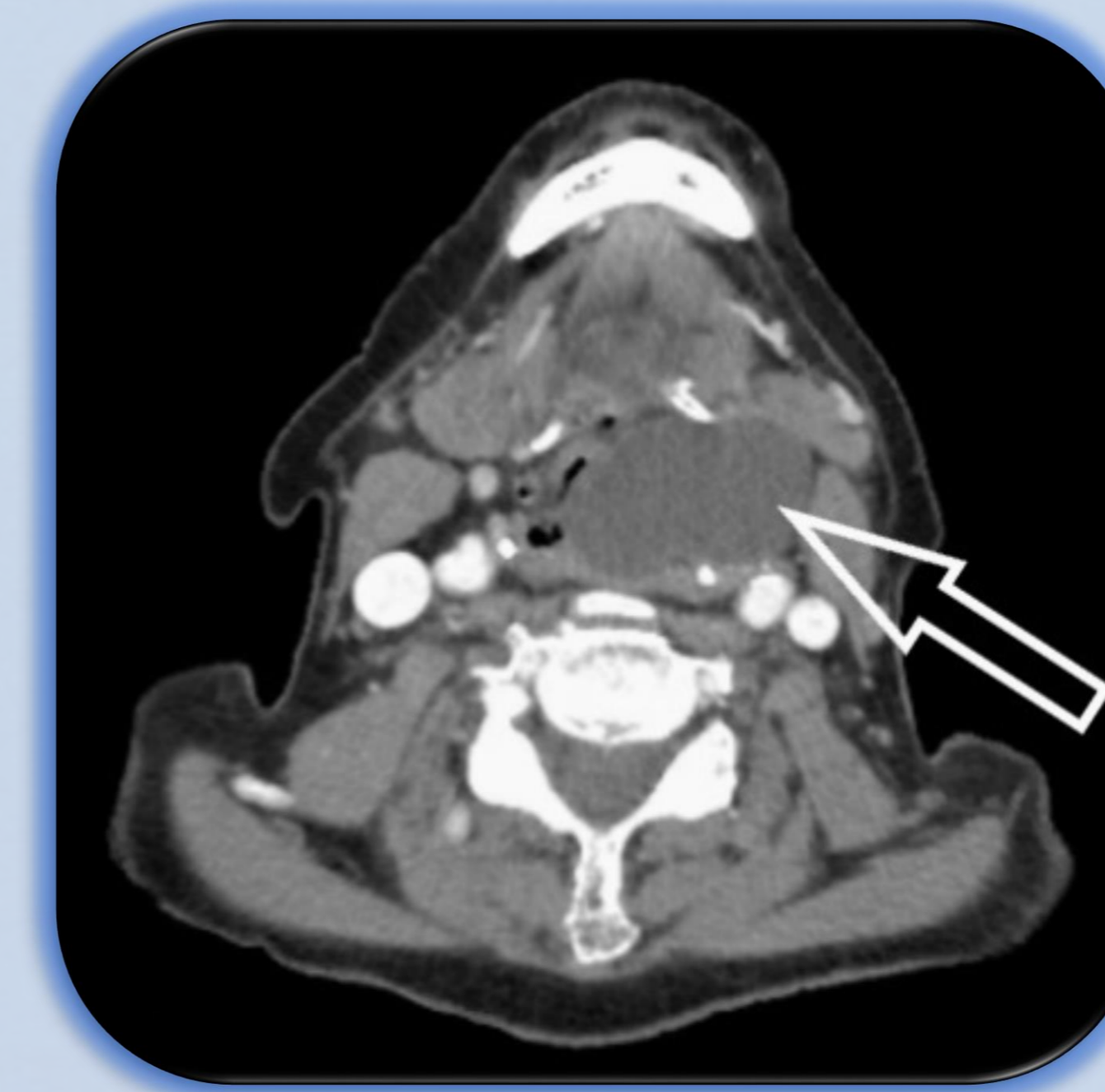
- ❖ An acute upper airway obstruction is an emergency condition often requiring immediate aggressive medical management and/or surgical intervention.
- ❖ The most common aetiologies for such obstruction in the elderly are malignancies and infections.<sup>1</sup>
- ❖ We present a case with an atypical cause of acute upper airway obstruction.

### PATIENT PRESENTATION

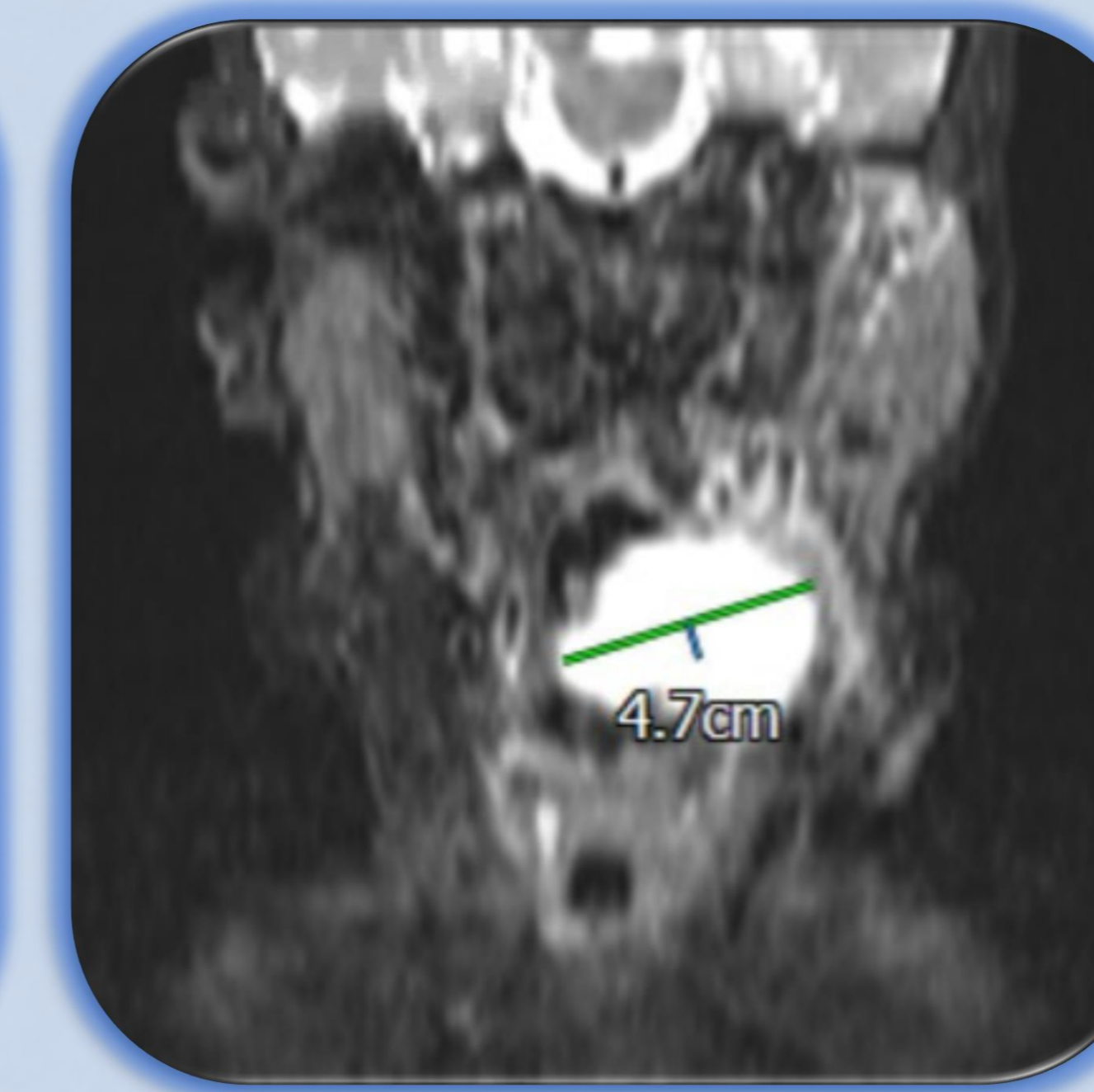
- ❖ A 75-year-old diabetic lady on long term anticoagulants presented to A&E with a three-day history of shortness of breath and worsening stridor.
- ❖ She was also complaining of a sore throat and inability to swallow her saliva.
- ❖ Fiberoptic nasendoscopy showed a left supraglottic swelling causing laryngeal obstruction.
- ❖ The patient was transferred immediately to theatre where she was intubated and a surgical tracheostomy was performed.
- ❖ Direct laryngoscopy demonstrated a large submucosal supraglottic mass which was suspected to be neoplastic in nature.

### MANAGEMENT - INVESTIGATIONS, TREATMENT AND OUTCOME

- ❖ After initial stabilisation of the patient, a contrast enhanced CT Scan of the neck and thorax and an MRI scan of the neck were performed.
- ❖ The CT scan revealed a large cystic lesion, benign in appearance, in the left supraglottis, causing complete obstruction of the airway at the level of the left pyriform fossa.
- ❖ The MRI scan revealed a large left sided supraglottic cyst measuring 47 mm x 28 mm x 36 mm and corroborated the other CT scan findings.

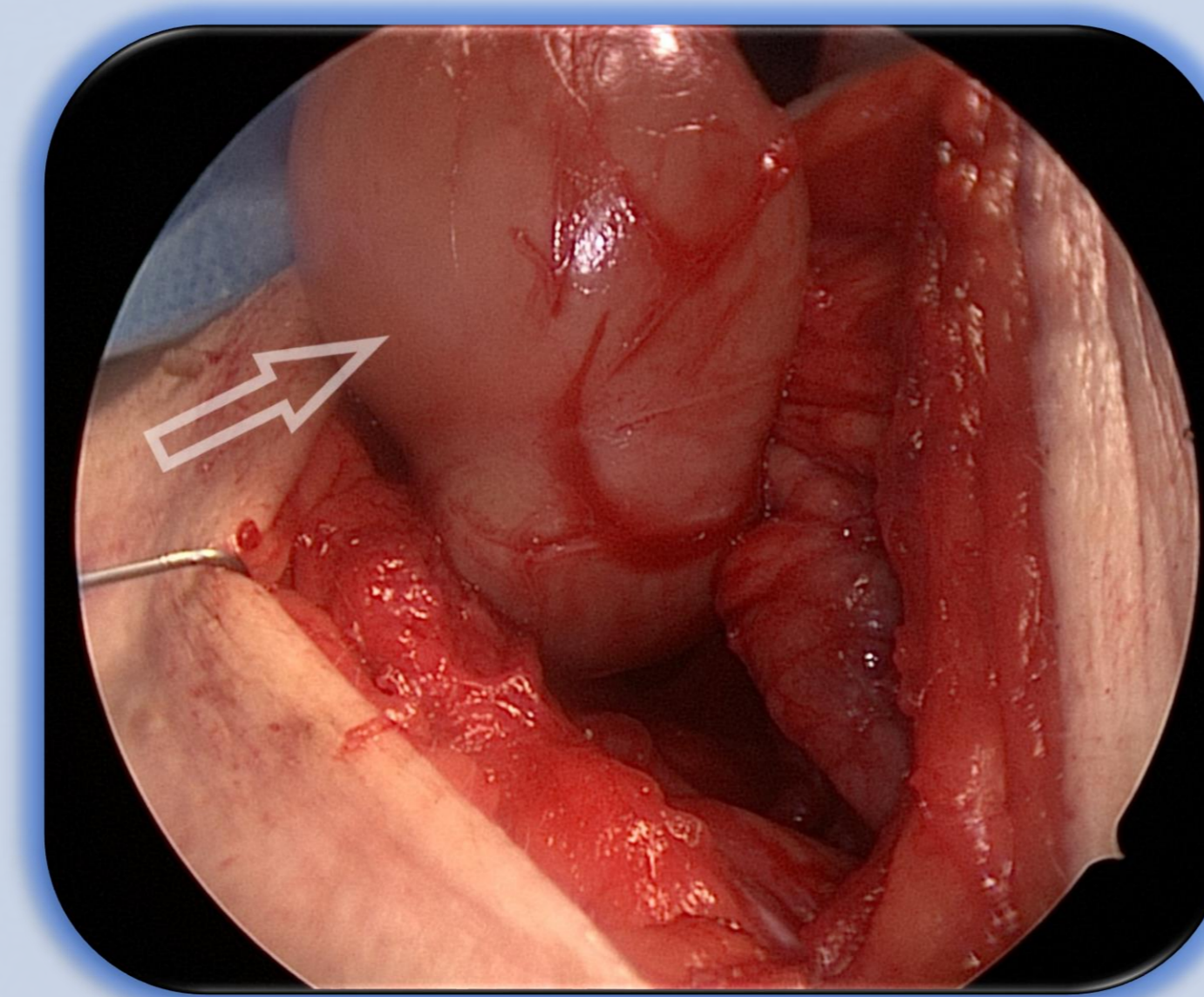


CECT Scan (axial) showing the lesion (white arrow)



T2 MRI Scan (coronal) showing the lesion

- ❖ The patient was discussed at the Head and Neck MDT. The MDT outcome was that it was a cystic supraglottic lesion suggestive of a laryngocele and an elective excision of the lesion was advised.



Intraoperative view of the laryngocele

- ❖ As per the MDT plan, an elective excision of the lesion was done.
- ❖ The procedure involved a transverse neck incision with elevation of subplatysmal flaps and identification of the cystic lesion between the left submandibular gland and the sternocleidomastoid.
- ❖ The cyst was dissected carefully and followed between the thyroid cartilage and the hyoid bone to complete total removal.
- ❖ Intraoperative laryngoscopy confirmed normal vocal cords with normal abduction on lightening of anaesthesia.
- ❖ Subsequent recovery was uneventful and the tracheostomy was decannulated after a period of about two weeks under close supervision.
- ❖ She was discharged after confirming the absence of any swallowing or breathing difficulty at the time of the decision.
- ❖ Histopathological examination showed fragments of a cystic lesion lined by pseudostratified ciliated epithelium with the connective tissue showing a fibrous cystic wall with a dense infiltrate of mixed chronic inflammatory cells – suggestive of a benign cystic lesion, a laryngocele.
- ❖ Outpatients follow-up of the patient revealed a good laryngeal airway with bilateral normally mobile vocal cords.

### DISCUSSION

- ❖ Laryngoceles are abnormal cystic dilatations of the saccule, often filled with air, cystic fluid (laryngomucocele) or pus (laryngopyoceles).
- ❖ It is a rare entity but is occasionally associated with fatal complications including acute airway obstruction.<sup>2</sup>
- ❖ This case demonstrates the need for a high index of suspicion and careful work-up including radiological investigations to arrive at a diagnosis.

### CONCLUSION

- ❖ Laryngoceles are rare lesions and airway obstruction due to mixed or internal ones are even rarer. However, they should be included in the differential diagnosis for patients presenting with symptoms of airway obstruction.

### REFERENCES

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