Giant tracheocele

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Tracheocele, a protrusion of the mucous membrane through a defect in the tracheal wall, may be congenital or acquired.^{1,2} Tracheoceles are rare,¹ and most cause only a few symptoms, which are usually well tolerated.^{1,3} We report the case of a 52-year-old man with a giant tracheocele that was incorrectly diagnosed preoperatively as a laryngocele.

CLINICAL SUMMARY

A 52-year-old Chinese man was seen in our outpatient clinic with a gradually progressive right-sided neck swelling of 2 years' duration. He did not have any other symptoms. Physical examination revealed a swelling, 8 × 6 cm in its largest vertical and horizontal dimensions, respectively, that occupied both the anterior and posterior triangles of the right side of the neck. The lesion extended from the superior border of thyroid cartilage to the level of supraclavicular fossa. The swelling was nontender, soft, and compressible. The skin over the swelling appeared normal. The swelling increased in size in response to the Valsalva maneuver.

A computed tomographic scan of the neck and upper thorax (Figure 1) revealed a large, air-filled cavity, located on the right anterior aspect of trachea and larynx and extending from the thyroid cartilage to the third thoracic vertebra. No communication of the swelling with the trachea or larynx could be detected on the images. A barium esophagogram did not show any communication between the esophagus and the swelling. Flexible bronchoscopy also could detect no communication of the swelling with the larynx or trachea.

A provisional diagnosis of laryngocele was made on the basis of the location of the mass and the frequency with which such lesions occur in the neck. Surgical excision of the swelling was planned for cosmetic reasons.

With the patient under general anesthesia, the swelling was approached through a collar incision. During surgery, a small communication of the swelling with the trachea was noticed on its right posterior aspect between the second and third tracheal rings. On the basis of this finding, a diagnosis of tracheocele was made. The tracheocele was excised en bloc (Figure 2, A), and the defect was closed in two layers with Prolene sutures (Ethicon, Inc, Somerville, NJ). The

FIGURE 1. A, Computed tomographic scan of neck at level of thyroid cartilage showing tracheocele (white arrow) and larynx (black arrow). B, Computed tomographic image at level of second thoracic vertebra showing tracheocele (white arrow) and trachea (black arrow).

postoperative period was uneventful. The patient had no symptoms at a follow up visit 2 months after the surgery.

Histopathologic examination of the excised specimen showed respiratory epithelium with underlying fibrocartilaginous tissue (Figure 2, B). This finding confirmed the diagnosis.

DISCUSSION

Tracheoceles can be classified as congenital or acquired.^{1,2,4} A congenital tracheocele arises from the tracheal wall because of an embryonic anomaly. The opening that communicates with the trachea is usually small, and the tracheocele wall may contain normal tracheal elements, such as cartilage or muscle.¹ An acquired tracheocele usually

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FIGURE 2. A, Excised specimen of giant tracheocele. B, Histologic preparation of specimen. Hematoxylin-eosin stain, magnification 40x.

results from trauma to trachea or from chronic bronchopulmonary disease,^{1,4} and the opening that communicates with the trachea is usually large.⁴ In our case, the absence of any history

of trauma or bronchopulmonary disease, the small communicating orifice between the swelling and the trachea, and presence of fibrocartilagenous tissue in the histopathologic examination point to a diagnosis of congenital tracheocele.

Laryngocele is the diagnosis usually considered for a large, air-filled swelling in the neck because of the common occurrence of this lesion. Both laryngoceles and large tracheoceles may not produce any symptoms other than neck swelling. In such situations, computed tomographic scan usually confirms the diagnosis. Bronchoscopy also may aid in diagnosis. At times, computed tomographic scan may not show clear communication between the swelling and the trachea¹ or the larynx. Bronchoscopy also may not reveal any opening in the larynx or trachea.^{4,5} In such situations, a diagnosis of laryngocele may be made; however, the possibility of a large tracheocele should also be kept in mind, as illustrated by our case.

Tracheoceles are more common on the right side.^{1,2} Treatment of tracheocele is generally conservative. Surgical excision of large tracheoceles may be undertaken for cosmetic reasons, in pediatric cases with severe respiratory symptoms, or in patients with frequent concomitant infections.¹

References

1. Bodet Agustí E, Martínez Vecina V, Romeu Figuerola C, Monzón Gaspà M. Tracheal diverticulum: a case report. *Acta Otorrinolaringol Esp.* 2007;58:278-9.
2. Koffi-Aka V, Manceau A, Cottier JP, Renjard L, Beutter P. [Tracheocele: a rare cause of pharyngeal disorders] French. *Ann Otolaryngol Chir Cervicofac.* 2002; 119:186-8.
3. Djamouri F, Le Pimpec Barthes F, Pheulpin G, Grignet JP, Carnot F, Riquet M. [Air-filled cysts of tracheal origin: nosological problems and actual frequency] French. *Rev Mal Respir.* 2002;19:523-6.
4. Briganti V, Tavormina P, Testa A, Oriolo L. Giant tracheocele following primary tracheostomy closure in a 3 year old child. *Interact Cardiovasc Thorac Surg.* 2004;3:411-2.
5. Teker AM, Lorenz RR, Lee WT, Murthy SC. Radiology quiz case 1. Tracheocele. *Arch Otolaryngol Head Neck Surg.* 2007;133(940):942-3.

Late embolization to the aortic arch of an Amplatzer Device used to occlude a baffle leak

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We report a case of late migration to the aortic arch of a percutaneous Amplatzer Septal Occluder Device (AGA Medical Corp, Plymouth, Minn) used to occlude a baffle leak after a Mustard procedure. After an unsuccessful attempt at percutaneous removal of the embolized device from the aortic arch, the device was removed surgically with uncomplicated recovery.