CLINICAL RECORDS

FATAL THYROGLOSSAL CYST

By H. E. M. KAY (Portsmouth)

SUDDEN fatal asphyxia resulting from an unsuspected thyroglossal cyst does not appear to have been reported before.

A healthy man of 35 experienced pain in the throat and inability to swallow, the onset of both symptoms being fairly abrupt. After half an hour a doctor was called who, however, could discover no certain cause of the symptoms. Shortly afterwards the patient had difficulty in breathing and within 20 minutes—an hour from the initial symptoms—he had died of asphyxia.

Autopsy, 26 hours after death, revealed a large, smooth and pale swelling arising between the epiglottis and the tongue and obliterating the vallecula on either side. It was not quite symmetrical being larger and more tense on the left. The dimensions were approximately 45 × 25 × 20 mm., and, since a large portion of the swelling was composed of œdema fluid, it is possible that, at the time of death, it was even larger, some of the fluid and all the blood having drained away under tension.

At a point on the anterior surface and slightly to the left of the midline was a small punctum through which could be expressed some yellowish-grey rather viscid material. Further examination revealed a cyst beneath this point, 15 mm. in diameter and filled with the same sticky material. Its position was slightly to the left of, but overlapping, the midline. Its lining was uniformly pale and smooth. The remainder of the swelling, around the cyst, was the consequence of œdema of the submucous layer.

There were no other significant findings at autopsy.

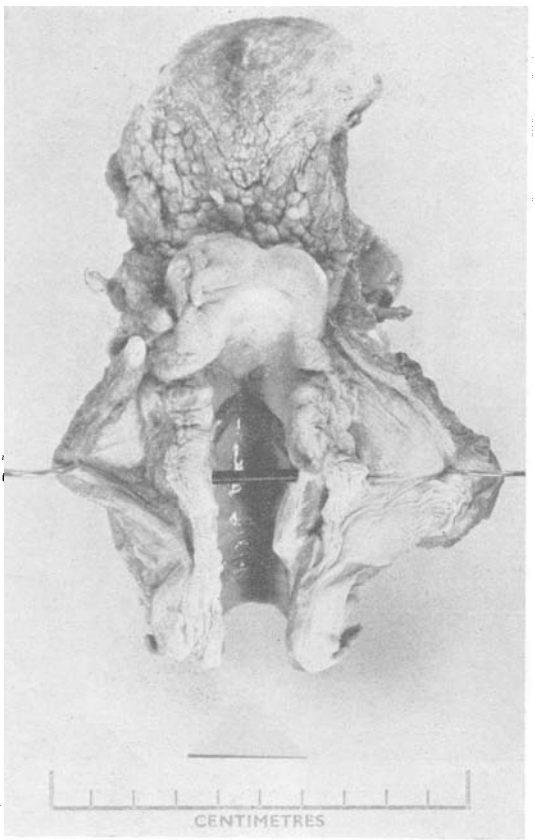
Microscopy revealed a fairly typical thyroglossal cyst. It contained cellular debris with cholesterol crystals and some Gram-negative bacilli. The epithelial lining was in part squamous stratified, in part columnar pseudo-stratified or simple columnar epithelium. Outside this the loose submucous tissue of the vallecula was exceedingly œdematous and in places acutely inflamed. Polymorphs were present, both scattered diffusely and in more tightly packed foci which, in places, had broken down to form micro-abscesses.

In addition it appeared that the cyst contents, which were on the point of being extruded through the punctum into the lumen of the pharynx, had already ruptured at an adjacent point into the tissues. The submucosa here contained debris similar to that in the cyst itself and further debris was found also, closely mixed with inflammatory cells, packing the dilated lymphatics in the same region.

This may explain the sudden onset of the fatal œdema with no preceding symptoms. The peri-cystic inflammation with micro-abscesses had evidently

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been present for many hours at least. The rupture of cyst contents into tissues already inflamed (and possibly sensitized) by an earlier similar invasion, might well have produced the sudden massive increase of œdema which was so dramatically fatal.



Cyst arising between Epiglottis and Tongue.

I wish to thank Dr. E. M. Darmady for permission to publish this case and Mr. G. Flower for the photograph.

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