A clicking larynx

By R. T. COUNTER

Introduction

ONE of the hardest and yet most interesting problems the E.N.T. Surgeon has to face is pain in the head and neck. Every year our knowledge of possible causes of these, often obscure, diagnoses is increased. It is hoped that this article will add one more diagnostic 'hatpeg'.

History

A 23-year-old naval rating presented to his medical officer with discomfort in the left side of his neck which had developed several months earlier. He stated that he was lying on the floor watching television, and on swallowing noticed a pain on the left side of his neck. A mild lingering tenderness remained for some weeks until he thought he felt a lump in the left neck which was painful on swallowing or yawning. There was no dysphagia or hoarseness. Past history was clear and he was fit.

Examination

Cardiovascular, respiratory and central nervous systems were unremarkable. He was found to have normal ears, nose and throat including indirect laryngoscopy. His neck revealed a tender area situated around the left side of the hyoid bone. On swallowing there was a definite 'click' and the hyoid body/greater cornu seemed to ride over the thyroid lamina on the left. This 'click' disappeared if he swallowed with full cervical extension. The tonsil fossae were clear. The right side of the neck was normal.

Investigations

X-ray of the styloid process showed it to be normal in length. Attempts at visualizing the mechanism involved with screening were uniformly unsuccessful.

Treatment

Initially, it was felt that a styloid process syndrome (Moffat, Ramsden, and Shaw, 1977) was a possibility. Depo-Medrone 80 mg was injected locally, weekly, for three weeks but with no success.

It was decided to expose the larynx through a left skin crease incision directly over the area involved. The strap muscles were split longitudinally and the thyrohyoid membrane exposed.

The only abnormality detected was an apparently shortened distance between the hyoid bone and the thyroid cartilage on the left.

The mucoperichondrum was elevated on the left thyroid lamina starting 1·5 cm below the upper edge (Fig. 1). The elevation continued over on to the internal surface of the lamina for a similar 1·5 cm depth. The cartilage exposed was removed over the entire width of the left thyroid lamina. The superior

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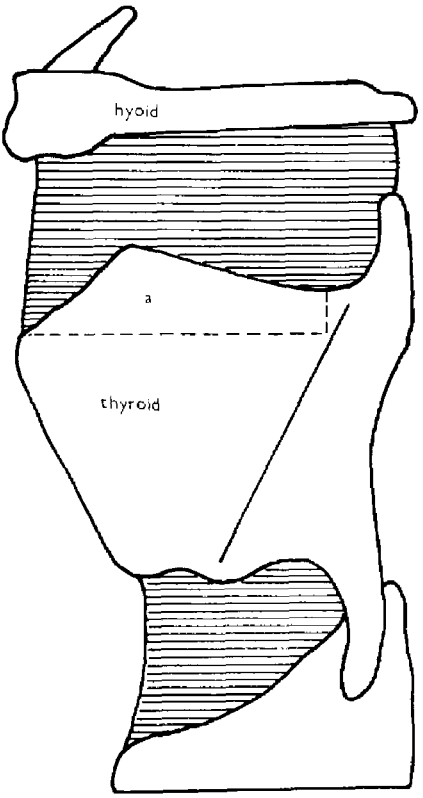


FIG. 1

Left lateral view of the larynx and hyoid bone showing the area (a) removed at operation.

cornu was left as this seemed too far lateral to be producing trouble. Muscle attachments were left in continuity with the mucoperichondrium. The hyoid could not be made to touch the thyroid cartilage by passive traction, after removal of the cartilage.

The mucoperichondrium was closed with 3/0 chromic catgut. A small Penrose drain was inserted and skin closed with silk sutures. Recovery was uneventful and relief was noted immediately. He has had no return of trouble three months post-operatively.

Discussion

The dividing of the stages of deglutition into three is well accepted. The pharyngeal stage contains a period when 'as the bulk of the bolus enters the upper pharynx, the larynx is raised towards the hyoid bone' (Ardran and Kemp, 1961) and 'the hyoid rotates so that its greater cornua becomes horizontal (rather than parallel with the lower border of the mandible)' (Ardran and Kemp, 1956).

It would seem that the problem of the 'clicking' occurred during these laryngeal evolutions but the actual reasons for its development remain obscure.

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Summary

A case of a 'clicking', painful act of deglutition is presented. Overriding of the hyoid bone and the thyroid lamina is thought to have been the mechanism. A partial thyroid laminectomy performed sub-mucoperichondrially effected an immediate and, at present, lasting cure. No similar case could be found in the literature after extensive searches.

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