

SHORT COMMUNICATION

The use of triamcinolone in thyrohyoid syndrome

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Pain that is worsened by swallowing and localised laterally between the thyroid cartilage and hyoid bone is termed thyrohyoid syndrome. Similar syndromes with other names (such as styloid syndrome) have been described based on the localisation of symptoms.^{1–3}

It is likely that calcification or tendonitis of the hyoid bone and related muscles and ligaments are responsible for these symptoms. Microscopic evidence of degenerative changes were found in the hyoid bone that was removed surgically from a patient with hyoid syndrome.⁴ Calcification and formation of bone in the thyrohyoid ligament have also been reported.⁵ The local injection of triamcinolone acetonide has been suggested as a treatment for hyoid syndrome as well as for pain localised to the thyroid and cricoid cartilages.^{6,7}

The relevant surgical anatomy is illustrated in Fig. 1. The thyrohyoid ligament is a broad fibroelastic membrane that extends from the thyroid cartilage to the hyoid bone. It is separated from the latter by a mucous bursa, which facilitates swallowing. Sometimes a cartilaginous nodule, called the cartilago triticea, can be found within the lateral

thyrohyoid ligament. Thyrohyoid syndrome can affect the areas extending from the greater horn of hyoid and lateral thyrohyoid ligament to the superior horn of the thyroid cartilage.

We report on five male and eight female patients (mean age 54 years; range 30–86 years) who complained of lateral neck pain localised to the thyrohyoid region. In all cases, the pain was aggravated by neck movements or swallowing, and pronounced tenderness was found over the thyrohyoid region on palpation. General examination showed no evidence of disease in the oropharynx or cervical spine. Direct and indirect laryngoscopy was normal. The symptoms had not responded to conventional non-steroidal drugs. Triamcinolone acetonide (40 mg/ml; Kenalog) was injected at the site of maximum tenderness using a 25-G needle. The needle was inserted laterally between the hyoid bone and thyroid cartilage to a depth of about 1 cm. Patients were reviewed at roughly 6-weekly intervals. The injection was repeated in those whose symptoms did not improve. Eleven of the 13 patients obtained complete relief of their symptoms. Seven were cured after only one injection, and a further four patients obtained complete relief after a further injection about 6 weeks after the first. Two patients, who also had other symptoms, including facial and temporomandibular joint pain, did not obtain any relief after two injections, and so no further injections were given. There were no recognisable side effects from the injections. When reviewed at 12 months, the 11 patients remained symptom-free.

It is clearly essential to exclude other disease (including malignancy) before a diagnosis of thyrohyoid syndrome is made. Many patients who present with pain on swallowing are frightened about cancer, and a simple explanation and reassurance that no disease is present is all that is required. However, a diagnosis of thyrohyoid syndrome can reliably be made in patients who present with persistent pain that has failed to respond to non-steroidal anti-inflammatory drugs and with local tenderness on palpation in this area.

Triamcinolone acetonide was used because of its depot, long-acting effect. Complete abolition of symptoms occurred after only one injection in over half of the patients

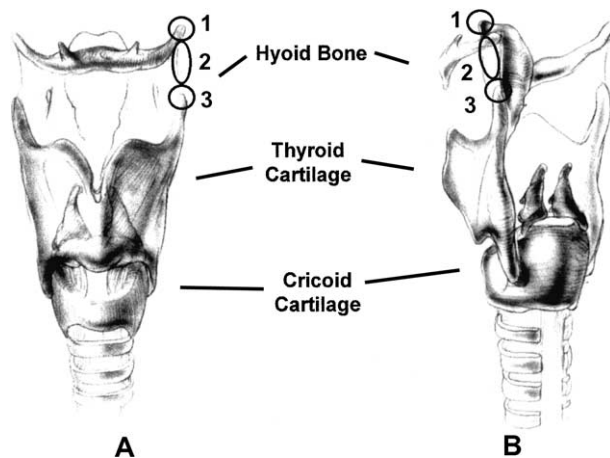


Fig. 1 Anterior (A) and posterolateral (B) views showing the relation of the greater horn of hyoid, thyrohyoid ligament and superior horn of thyroid cartilage, and the three focal areas of pain in this region.

reported, but a further four patients obtained relief after a second dose of triamcinolone, so it may be necessary to repeat the injection.

The important clinical point is the accurate diagnosis. Triamcinolone is used for its anti-inflammatory and fibrinolytic effect in an area where localised calcification and tendonitis produce symptoms. A diagnosis of thyrohyoid syndrome should be considered in the differential diagnosis of patients who present with localised lateral neck pain.

REFERENCES

1. Brown LA. Hyoid bone syndrome. *South Med J* 1954; 47: 1088–1091.
2. Christiansen TA, Meyerhoff WL, Quick CA. Styloid process neuralgia – myth or fact. *Arch Otolaryngol* 1975; 101: 120–122.
3. Steinmann EP. Styloid syndrome in the absence of elongated process. *Acta Otolaryngol* 1968; 66: 347–356.
4. Ernest EA, Salter III EG. Hyoid bone syndrome: a degenerative injury of the middle pharyngeal constrictor muscle with photomicroscopic evidence of insertion tendinosis. *J Prosthet Dent* 1991; 66: 78–83.
5. Ilankovan V. An anomaly of the thyrohyoid articulation. *J Laryngol Otol* 1987; 101: 959–961.
6. Robinson PJ, Davis JP, Fraser JG. The hyoid syndrome: a pain in the neck. *J Laryngol Otol* 1994; 108: 855–858.
7. Kunachak S. Anterior cervical pain syndromes: hyoid, thyroid and cricoid cartilage syndromes and their treatment with triamcinolone acetate. *J Laryngol Otol* 1995; 109: 45–52.

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