Palatal pain due to exostosis of the posterior palatal spine in a cleft patient

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INTRODUCTION

Craniofacial pain seems to be the most challenging and complex entity to encounter. The diagnosis and management is difficult due to the complex loco-regional anatomy and this is compounded by the vagueness of the symptoms experienced.[1]

Very often the patient presents with symptoms that are conflicting in some aspects, and overlap in others. This invariably results in a confused clinical picture.[2]

This publication introduces a rare cause of orofacial pain in a cleft patient due to ectopic bony growth that was treated by surgical excision.

CASE REPORT

An 11-year-old female patient who presented with 5 months history of vague, poorly localized pain in the palate that referred to the pharyngeal region.

The patient was born with a complete soft palate and partial hard palate cleft. Surgery for the repair of the palatal cleft was undertaken at 5 months age, and was achieved by means of an intravelar veloplasty technique — Type II (modification of the intravelar veloplasty incorporating a stitch around the tendon of the tensor tympani muscle to improve middle ear ventilation).[3]

Surgery and subsequent postoperative healing was uneventful. Regular monthly follow-up for the first 3 months were undertaken to assess wound healing, thereafter, annual appointments were scheduled to assess speech therapy compliance and velopharyngeal competency.

The patient progressed well with speech therapy despite having a relatively short soft palate.

On her most recent annual appointment at the age of 11 years, she reported palate-pharyngeal pain that was nonspecific, but regionalized toward the left side of the oral cavity.

The patient was troubled by this discomfort for a period of 5 months, which resulted in a significantly reduced intake of food and fluids. The character of the pain was described as waxing and waning, with a variable degree of intensity that worsened during swallowing, eating, and drinking.

Medical history revealed nothing of concern. The patient was healthy with no abnormalities apart from the congenital cleft palate that was repaired 10 years earlier. She had frequently taken analgesics to alleviate the pain; however complete relief was never attained.

Clinical examination revealed a shallow ulcerative lesion at the hard palate-soft palate junction left off the midline.
Palpation of this region elicited extensive amount of pain. Despite patient apprehension, a bony prominence was palpated beneath the thin palatal mucosa.

A decision was made to rely on clinical judgment and to surgically explore the region. Preoperative computed tomography imaging was considered but deferred due to radiation exposure. Under general anesthesia, a small linear incision was made through the mucosa directly overlying the bony protuberance. Subperiosteal blunt dissection was performed to expose the left posterior palate margin. A 4 mm long bony exostosis of the left clefted posterior palatal spine was surgically exposed. The bony spicule projected caudally toward the oral cavity.

The bony prominence was removed with the aid of a bone rongeur. The area was irrigated copiously and closed with interrupted resorbable vicryl sutures (polyglactin 910 - Ethicon, Sommerville, NJ, USA) [Figures 1-4].

Healing was uneventful, and the patient was symptom free after a 5 day healing period. At the 1 month follow-up, the patient reported resolution of her symptoms. Histological analysis of the excised specimens indicated reactive bony changes.

**DISCUSSION**

Pain in the region of the soft palate and pharynx is a diagnostic dilemma. There are a number of publications, limited to case reports, that have made reference to etiological causes of this clinical problem.[4] Hjørting-Hansen and Lous were the first to coin the term pterygoid hamulus syndrome which described pain in the palate and pharyngeal area as a result of an abnormal growth of a pterygoid hamulus.[5] Hertz and Wooten reported on this type of pain to be as a result of an elongated pterygoid hamulus.[6,7] Kronman et al. described a tensor veli palatine bursitis that mimicked similar discomfort. These symptoms...
 Included, but were not restricted to, variable pain; burning sensations and swelling and erythema in the palate; a feeling of strangeness and discomfort during gustatory function.\[^{4,8,9}\]

Local etiological factors of referred pain to the soft palate and pharyngeal area may also be caused by an elongated styloid process, salivary gland pathology, middle ear abnormalities and temporomandibular joint disorders.\[^{1,2}\]

Although local factors are most appealing offenders, systemic conditions should also be considered, especially in the absence of obvious local causes. The systemic conditions to be considered include anemia, hypertension, auto-immune diseases, neurosis, psychosis, and psychosomatic disturbances (stomatitis, xerostomia).\[^{4}\]

The craniofacial region presents as an area with complex and overlapping anatomical architecture. This results in a distortion of clinical signs and symptoms when a patient presents with pain and discomfort, and makes diagnosis and management difficult.

A combination of history taking and thorough clinical examination is paramount in arriving to a diagnosis. When approaching these patients, local causes of pain should be considered firstly, prior to investigating systemic factors.

Common symptoms include sharp or burning pain in the palatal and pharyngeal region that may remain localized or refer to the ipsilateral ear or temporomandibular joint. This may occur spontaneously or elicited by touch or eating and drinking.

Shankland suggests that diagnostic testing with local anesthesia may be valuable if a local cause has been identified.\[^{1}\]

This paper introduces a very uncommon cause of palatopharyngeal pain which has never been described in a cleft patient with an inferiorly-rotated bony growth of a clefted posterior palatal spine. This is an unusual phenomenon presenting in a patient with a repaired cleft.

**REFERENCES**


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