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Commentary

Clinician's Corner

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Clinicians' Corner

This is a new department which was suggested by Associate Editor Roberta Pierce, of Huntsville, Alabama. Please send in all of your professional questions, and we shall try to send them to representatives of the appropriate disciplines for answers. To get us off to a good start, Roberta sent in the first question, and Dr. Robert M. Mason returned a very thoughtful answer. *IJOM* wishes to thank both of these contributers.

Editor.

QUESTION:

As an oral myologist, I notice that most of my patients have a "shelf" on the alveolar ridge behind the upper incisors. Is this normal? Is it related to tongue thrust and/or anterior protrusion? Please explain.

Majority of patients: Mine:

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ANSWER:

The maxillary alveolus and the palate proliferate by appositional growth. New bone is laid down on the alveolus and on the oral surface of the palate. The "V" principle has been a convenient means of describing how the maxillary arch expands as new bone is formed on the oral surface of the palate.

While the influence of environmental factors, such as an anterior resting tongue position and a mouth-open posture are not well known as regards the morphology of the oral cavity, it is generally accepted that the resting tongue plays a role in influencing the shape of the palate and anterior alveolus.

The individual who is referred for myofunctional therapy may be said to have a reduced physiological capacity for adaptation to morphological variation. Although it has not yet been well documented, I would not be surprised to find a host of specific morphological variations in a comparative study of tongue thrusters with a matched control of normal individuals. Such variations might logically involve the height of the mandibular ramus, the width of the maxilla at the tuberosities, the height of the palatal vault at various places in the anteroposterior dimension, and the position of the resting tongue.

The observation of a "shelf" on the anterior maxillary alveolus/anterior palate in the myofunctional patient is an excellent clinical observation, and a logical consequence of a forward resting tongue and mouth-open posture. The alveolar ridge just posterior to the maxillary incisors would be expected to be flat, with an abrupt sweep vertically to a narrowed midpalatal vault. The "spot", a convenient clinical description of a functional target, would be displaced. The differential growth of the maxillary alveolus and the descending palate and nasal septum complex - in an environment where the mouth (mandible) is hinged open with tongue flattened and positioned forward, could aid in accentuating the proliferation of the alveolus and the vault of the midpalate area. If so, this could account for the clinical observation made. The condition is more likely a consequence of an anterior resting tongue position that functional activities of the tongue in a forward direction. Thus, growth has been modified by environment to the extent that the shape of the palate is altered to a noticeable degree.

—Bob Mason

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