

## Heterotopic salivary tissue in a weanling colt

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A 7-month-old 260-kg Quarter Horse colt was referred to the veterinary medical teaching hospital for evaluation of a draining wound in the left temporal region, which had existed from time of birth. The drainage had not changed over time, nor had it increased with mastication.

On admission, physical examination revealed a hair-lined draining tract immediately caudoventral to the zygomatic process of the left temporal bone. The area was slightly swollen and palpation did not elicit signs of pain. A palpable fibrous tract extended caudally and dorsally toward the base of the left ear. A small volume of clear, seromucoid fluid was observed at the opening of the tract.

Cytologic examination of the fluid failed to determine the origin of the drainage. Neither ectopic dental structures nor osseous abnormalities were detected via survey radiography. Positive contrast radiography revealed the tract to be approximately 3 to 4 cm long, and 3 to 6 mm in diameter, and extending deep to the zygomatic temporal bone. Surgical excision of the tract was recommended for diagnosis and treatment.

With the colt under routine general anesthesia, an elliptical skin incision was made, followed by sharp dissection of the fibrous tract, which had been delineated by an aqueous solution of methylene blue. A small amount of tan glandular tissue was removed from the termination of the tract, ventrolateral to the zygomatic arch. Soft tissues and skin were routinely apposed, and a light pressure wrap was applied. Telephone interview with the owner 5 months after surgery revealed no complications and no further drainage.

Histologically, the tract was composed of connective tissue, surrounding a deep, well-delineated glandular mass. Mucous cells with serous demilunes formed the acini (Fig 1). Ducts between acini were lined with low cuboidal cells, and neutrophils and plasma cells were located in the surrounding con-

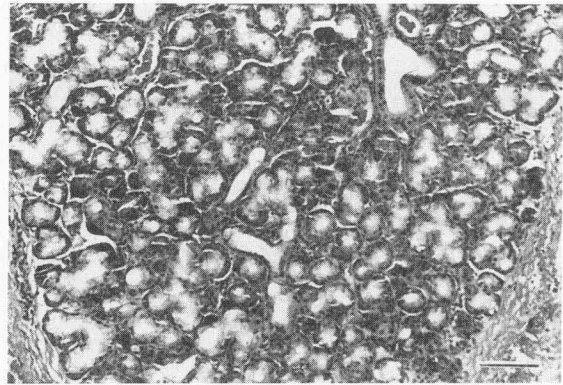


Figure 1—Photomicrograph of a section of tissue excised in conjunction with a draining tract of the left temporal region of a colt. Within the excised connective tissue was a mass of ectopic salivary gland tissue. Notice the mucous cells with serous demilunes. H&E stain; bar = 100 $\mu$ m.

nective tissue. The mass was compatible with a mixed-type salivary gland.

Differential diagnoses for facial drainage in the colt of this report included dentigerous cyst, penetrating foreign body, sequestrum, and aberrant salivary tissue. The location of the draining tract was not consistent with that typical of a dentigerous cyst; however, radiography was performed to rule this out. Lack of radiographic or historical evidence of a penetrating foreign body or sequestrum reduced the likelihood of these diagnoses.

In contrast to that described in human beings,<sup>1</sup> drainage from the wound did not appear to increase with feeding. Aberrant salivary tissue in domestic animals may rarely be subject to the development of primary neoplasia as is suspected in some affected human beings.<sup>2</sup> Although surgery is generally pursued for cosmetic reasons, prevention of the development of a primary salivary neoplasm originating in the heterotopic tissue is an additional reason to excise the tissue.

Histologic examination of the excised tissues confirmed the diagnosis of heterotopic salivary tissue. A distinction must be made between heterotopic salivary tissue and accessory salivary tissue. The latter is defined as a detached body of salivary tissue along a major salivary duct.<sup>3</sup> Approximately

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25% of human beings have accessory salivary tissue,<sup>4</sup> which is generally separated from the parent gland by only 6 mm.<sup>3</sup> Khatra<sup>5</sup> described a finding of accessory parotid salivary tissue in a buffalo calf in which the accessory tissue had a duct that emptied into the main parotid duct.

The tissues excised in the colt of this report did not have a duct connecting it to a major salivary gland; therefore, a diagnosis of accessory salivary tissue could not be made. On the basis of the proximity of the draining tract to the parotid salivary gland and the histologic findings of mixed-type

salivary tissue, we suggest that this heterotopic tissue was of parotid salivary gland origin.

1. Youngs LA, Scofield HH. Heterotopic salivary gland tissue in the lower neck. *Arch Pathol* 1967;83:550-556.
2. Singer MI, Applebaum EL, Loy KD. Heterotopic salivary tissue in the neck. *Laryngoscope* 1979;89:1772-1778.
3. Batsakis JG. Heterotopic and accessory salivary tissues. *Ann Otol Rhinol Laryngol* 1986;95:434-435.
4. Frommer J. The human accessory parotid gland: its incidence, nature, and significance. *Oral Surg* 1977;43:671-6.
5. Khatra GS. Accessory parotid salivary gland in a buffalo calf. *Indian Vet Med J* 1980;4:191-192.

## Book Review:

### A Special Kind of Doctor: A History of Veterinary Medicine in Texas

Authors Dethloff and Dyal have explored the evolution and growth of veterinary medicine in Texas, and their book possibly is the model among the twenty-some available historic writings on veterinary medical infrastructure in a state. Especially educative are the descriptions of the veterinary art and practice after the mid-1800s in Texas and the historic transition of those into a science and the modern disciplines. One tantalizing new thought, in my opinion, was expressed in their chapter "A Special Kind of Doctor": veterinary medicine in a broad sense is society's way of institutionalizing humankind's care for and interdependence with animals (p 4).

After that premise, the book is organized along a broad-based chronology. This understandably starts with the illustrious Mark Francis era and the founding of the Texas Veterinary Medical Association

(chapters 2 and 3). The maturing years—which involves an excellent essay on the less-well-known 1920-to-1940 period—are important to the understanding of the growing permanence of the profession (chapter 4), despite the nation's economy (good times and bad) and in what was thought to be a fast-changing society. There was a momentary disruption of life's goals for a few during World War II, but the immediate postwar planning led to successful realignment and focus on new forms of scientific applications and veterinary medical practice, which would challenge Texas veterinarians for 4 decades (chapters 5, 6, and 7). Chapter 8 on the "anatomy of a veterinarian" (p 144) describes the numerous projects in today's veterinary medicine, whether in Texas or another state. It carries through the prized thoughts that the veterinarian is a special kind of doc-

tor and that the profession is society's way of institutionalizing the care for and interdependence with animals.

Dethloff and Dyal's contribution to veterinary medical historic literature is finely written and interesting, is documented by chapter-by-chapter references and notes plus the bibliography, and is indexed. The figures are nicely selected and spread throughout the text. Reading ease is facilitated by the absence of pitfalls of earlier methods in presenting history. The front jacket (in color) bears the drawing *A Special Kind of Doctor* by James Harvey Johnson, DVM. Highly recommended. [*A Special Kind of Doctor: A History of Veterinary Medicine in Texas*. By Henry Dethloff and Donald Dyal. 216 pages: illustrated. Texas A&M University Press, College Station, TX 77843-4354. 1991. Price \$29.50.]—EVERETT B. MILLER