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Ocular dermoid associated with a tongue dermoid

Dermóide ocular associado a dermóide lingual

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Abstract

Dermoids have been found in the derma, in the eye globe, and in the nervous system. We report here a male dog, half-breed Neapolitan Mastiff and Brazilian Fila, with a dermoid covering the conjunctiva, sclera, temporal limbus and cornea. When the dog was submitted to general anesthesia for the excision of the ocular dermoid, the presence of an additional dermoid was detected along the midline of the tongue surface.

Keywords: dermoid; eye; tongue; dog.

Resumo

Os dermóides têm sido reportados acometendo o sistema nervoso, os olhos e a derme. Este relato de caso é sobre um cão macho, mestiço de Mastim Napolitano e Fila Brasileiro, com dermóide acometendo conjuntiva, esclera, limbo temporal e córnea. O animal foi submetido à anestesia geral e, no momento da intubação endotraqueal, foi observado dermóide na linha média da língua.

Palavras-chave: dermóide, olho, língua, cão.

A dermoid is a choristoma, a term applied to microscopically normal cells or tissues located in aberrant sites. As examples in men, we can mention residues of pancreatic tissue in the stomach or intestinal wall, small cells of the adrenal gland in the kidneys, lungs, ovary, or any other site (Rubin and Farber, 1994; Shofield and Cotran, 1994).

The ocular dermoid usually affects the temporal region of the limb, but may also involve the cornea, sclera, conjunctiva, eyelid or nictitating membrane (Hendrix, 1999). Walde et al. (1997) cited by Spiess and Wallin-Hakanson (1999), described an uncommon case of retrobulbar dermoid cyst in a Dachshund dog and Howard-Martin and Bowles (1988) described an intracranial dermoid cyst in a Wire fox terrier dog. The dermoid cyst may be enveloped by a kind of cystic wall, called dermoid system, and in this case it is called Dermoid (Targett, 1998). It can still appear in a tube of the skin with variable depth called dermoid sinus (Pratt, Knottenbelt and Welsh, 2000). Dermoid cysts have been found in the derm, ocular globe and central nervous system (Targett, 1998). There are reports of intracranial dermoid cysts in Golden retrievers and Wire fox terriers (Howard-Martin and Bowles, 1988; Targett, 1998) and dermoid sinuses have been described in different dog breeds such as Rhodesian ridgeback, Shih tzu, Yorkshire terrier, Boxer, Pyrene,

English bulldog, Chow-chow, and English Springer spaniel (Marks, Harari and Dernell, 1993; Fantone et al., 1995; Camacho et al., 1995; Booth, 1998; Pratt, Knottenbelt and Welsh, 2000).

The presence of aberrant tissue (for example, keratinized epithelium, hair, blood vessels, fiber tissue, fat, nerves, sweat glands, sebaceous glands, straight muscle, cartilage, and bone) inside the orbit may be of early developmental origin due to abnormal differentiation of an isolated group of cells. Epithelial or connective tissue inclusions may occur during the closure of the fetal pleats (Cook, 1999).

Ocular dermoids can be found in all species at birth, but may not be clinically recognized even in animals of several weeks of age (Cook, 1999; Whitley and Gilger, 1999). Genetic predisposition is observed in German shepherds, Dalmatians, Saint bernards (Bedford, 1999), Dachshunds and Doberman pinschers (Bedford, 1999; Whitley and Gilger, 1999). The problem may be unilateral or bilateral and may be associated with other ocular malformations (Dice, 1981). Small dermoids usually do not cause clinical signs (Slatter, 1990).

Eyelid dermoids can be multiple (Bedford, 1999). The hair causes conjunctival and corneal irritation provoking epiphora

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and keratitis (Slatter, 1990; Bedford, 1999). Corneal dermoids usually occur more frequently in the ventral region than in the dorsal region and more in the lateral than in the middle region (Bloog, 1980; Bedford, 1999). The treatment consists of careful surgical excision by conjunctivectomy or superficial keratectomy (Slatter, 1990; Whitley and Gilger, 1999).

We report here the case of a one year-old male dog, half-breed Neapolitan Mastiff and Brazilian Fila, which was brought to the Ophthalmology Unit of the "Governador Laudo Natel" Veterinary Hospital, Faculdade de Ciências Agrárias e Veterinárias, Universidade Estadual Paulista, Jaboticabal, SP/Brazil, with a history of ocular secretion and chronic discomfort in the right eye.

Ophthalmic examination revealed a dermoid formation involving the conjunctiva, sclera, cornea and temporal region of the limbus (Figure 1). Considering the nature of the problem and its behavior, surgical treatment was chosen. At the time of surgery, a rare occurrence of a formation with characteristic signs was identified on the central fissure of the tongue surface (Figure 2).

After excision of the choristoma, the ocular surface was protected with a flap of the third eyelid. In view of its little clinical interference, the dermoid mass on the tongue was left intact. Upon a last evaluation three weeks after surgery, the patient was found to be in good condition, presenting a minimal corneal scar.

Dermoids can occur in the most different places and should be surgically excised when they cause functional damage, infection, or discomfort.

The ocular dermoids are not common, although there are reports of predisposition in some breeds. This is a problem detected during the first months of life and correction is imperative as soon as the first signs of ocular suffering appear.

In the present case, the tongue dermoid, although in an aberrant location, was not causing any problems and therefore surgical intervention was not considered necessary.

Figure 1: Photographic image of a dermoid formation involving the conjunctiva, sclera, cornea and temporal region of the limbus in a male mixed breed dog.

Figure 2: Photographic image of a dermoid formation in the central region of the tongue of a male mixed breed dog.

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