ORAL PAPILLOMATOSIS IN THE COYOTE IN WESTERN CANADA

Authors: E. BROUGHTON, F. E. GRAESSER, L. N. CARBYN, and L. P. E. CHOQUETTE

Source: Journal of Wildlife Diseases, 6(3) : 180-181
Published By: Wildlife Disease Association
URL: https://doi.org/10.7589/0090-3558-6.3.180
ORAL PAPILLOMATOSIS IN THE COYOTE IN WESTERN CANADA

Oral papillomatosis in the coyote has been reported only by Trainer et al. (Bull. Wildlife Dis. Assoc. 4 (2): 52-54, 1968). The condition was found in one coyote in Andrew County, Texas, U.S.A., in 1966, and in two other coyotes elsewhere in Texas in 1967. This paper deals with the diagnosis of oral papillomatosis in coyotes in Saskatchewan and Alberta, in the past decade.

Case reports

Case No. 1: A female coyote was killed by a vehicle in Prince Albert National Park, Saskatchewan, in February 1969. It weighed 22 pounds and, except for the presence of numerous wart-like growths on the lips, tongue and adjacent tissues, appeared to be in good physical condition. General tooth wear and degree of root closure of the canines indicated that the animal was probably just under one year of age.

Histologically the tumour from the tongue and adjacent tissues was epithelial in origin and closely resembled the canine oral papilloma (Moulton, Tumors in Domestic Animals, University of California Press, 129, 1961; Smith and Jones, Veterinary Pathology, Lea and Febiger, 422, 1966) and the neoplasm described by Trainer et al. (op. cit.). The pedunculated papilloma consisted of hyperplastic, stratified squamous epithelium covered by a thick cornified layer and supported by thin vascularized fronds of the underlying connective tissue. Many of the squamous cells were enlarged and vacuolated. No basophilic intranuclear inclusions were observed. Oral papillomatosis was diagnosed on the basis of macroscopic and microscopic appearances.

Case No. 2: This coyote was shot near Drayton Valley, Alberta, in December 1962 because of the potential rabies hazard. The carcass was taken to the Alberta Veterinary Services laboratory for examination. There were numerous papillomas on the margins of the lips, the roof of the mouth, the tongue and the inner surface of the cheeks (Fig. 1). A diagnosis of oral papillomatosis was based on macroscopic appearance of the lesions. Age, sex and weight of the coyote was not recorded. While such large numbers of papillomas could have interfered with feeding, the animal’s stomach was full and contained remains of some other animal.

Case No. 3: In the early 1950’s, an extremely emaciated, weak coyote was killed by school children near Westlock, Alberta. Examination by the local veterinary practitioner, Dr. Robert Whynham, revealed extensive papilloma in the mouth and tongue. Oral papillomatosis was diagnosed from the macroscopic appearance of the lesions.

Discussion

We cannot classify the neoplasm occurring in the coyote as canine oral papillomatosis, since we did not attempt to transmit the papilloma to susceptible dogs or to identify the etiologic agent. Trainer et al. have suggested that coyotes, like dogs, may recover spontaneously from oral papillomatosis and develop strong immunity. If this is so the disease may be neither rare nor isolated; rather it may be frequently overlooked. The cases reported indicate that the disease has a wide geographical distribution.
FIGURE 1. Coyote oral papillomatosis.

*E. BROUGHTON,
°F. E. GRAESSER,
*L. N. CARBYN, and
*L. P. E. CHOQUETTE

*Canadian Wildlife Service, Department of Indian Affairs and Northern Development, 400 Laurier Avenue, West, Ottawa.

**Veterinary Services Division, Alberta Department of Agriculture, P.O. Box 4370, Edmonton 62, Alberta.

May 19, 1970