

## **SQUAMOUS CELL CARCINOMA OF THE FEET OF AN INDIAN HEDGEHOG**

Authors: FRYE, FREDRIC L., and DUTRA, FRANK R.

Source: Journal of Wildlife Diseases, 9(3) : 249-250

Published By: Wildlife Disease Association

URL: <https://doi.org/10.7589/0090-3558-9.3.249>

---

The BioOne Digital Library (<https://bioone.org/>) provides worldwide distribution for more than 580 journals and eBooks from BioOne's community of over 150 nonprofit societies, research institutions, and university presses in the biological, ecological, and environmental sciences. The BioOne Digital Library encompasses the flagship aggregation BioOne Complete (<https://bioone.org/subscribe>), the BioOne Complete Archive (<https://bioone.org/archive>), and the BioOne eBooks program offerings ESA eBook Collection (<https://bioone.org/esa-ebooks>) and CSIRO Publishing BioSelect Collection (<https://bioone.org/csiro-ebooks>).

Your use of this PDF, the BioOne Digital Library, and all posted and associated content indicates your acceptance of BioOne's Terms of Use, available at [www.bioone.org/terms-of-use](http://www.bioone.org/terms-of-use).

Usage of BioOne Digital Library content is strictly limited to personal, educational, and non-commercial use. Commercial inquiries or rights and permissions requests should be directed to the individual publisher as copyright holder.

---

BioOne is an innovative nonprofit that sees sustainable scholarly publishing as an inherently collaborative enterprise connecting authors, nonprofit publishers, academic institutions, research libraries, and research funders in the common goal of maximizing access to critical research.

## SQUAMOUS CELL CARCINOMA OF THE FEET OF AN INDIAN HEDGEHOG

FREDRIC L. FRYE and FRANK R. DUTRA

**Abstract:** A histopathologically-confirmed squamous-cell carcinoma involving all four feet was diagnosed in a captive Indian hedgehog, *Hemiechinus hemiechinus*.

A mature captive-raised male Indian hedgehog was admitted to the hospital because of swelling of all four feet. Inspection revealed massive swelling and distortion of the feet just distal to the carpi and tarsi respectively. This swelling was approximately 2½-3 times normal size. A fetid odor of tissue necrosis was quite apparent. The animal was euthana-

tized and necropsied.

### GROSS PATHOLOGY

Gross lesions were confined to the distal portions of all four limbs. The tumor was ulcerated, keratinized debris was adherent over some areas of its surface, and eroded areas were covered by fibrinopurulent exudate.

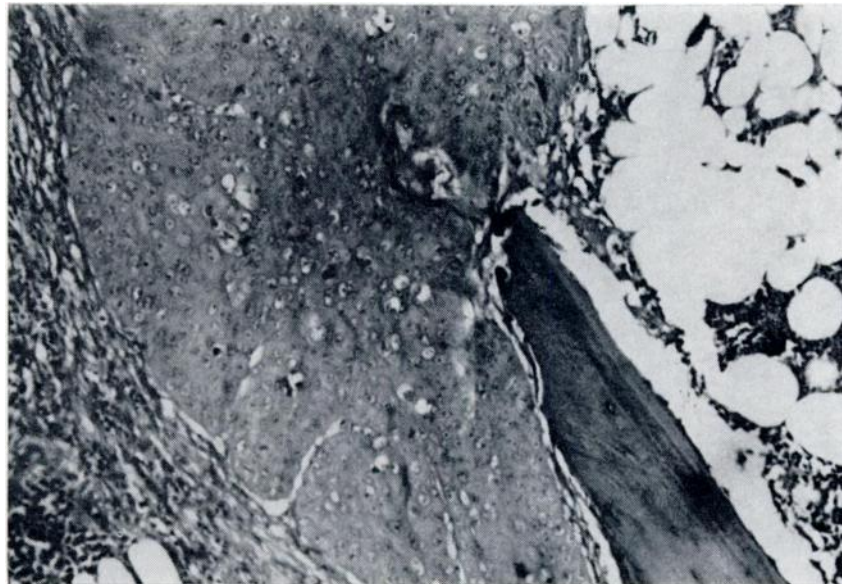


FIGURE 1. Low magnification of stained tissue section from the squamous cell carcinoma involving the feet of a hedgehog. Notice tumor invasion of bone.

From the Berkeley Dog and Cat Hospital, 2126 Haste St., Berkeley, California 94704, U.S.A. (Dr. Frye), and Eden Hospital Laboratories, 20103 Lake Chabot Rd., Castro Valley, California 94546, U.S.A. (Dr. Dutra). Supported in part by Grant No. Ca. 12490 by the National Cancer Institute.

**HISTOPATHOLOGIC FINDINGS**

The tumor consisted of partially differentiated squamous cells, which formed broad sheets. The centers of some of the infiltrating processes consisted of keratinized debris. The neoplastic cells varied considerably in size, had vesicular nuclei, and the eosinophilic cytoplasm tended to be keratinized as the centers of the infiltrating processes were approached. Keratohyalin granules were within the cells surrounding some of the centers of the epithelial masses.

Atypical greatly enlarged nuclei were occasionally seen, but mitotic figures were not numerous.

In many places, the stroma was infiltrated by lymphocytes and plasma cells.

**DIAGNOSIS**

Well differentiated keratinizing squamous cell carcinoma, invasive.

**DISCUSSION**

The hedgehog had been obtained as a young adult approximately 2 years prior to the onset of the neoplastic process. Husbandry consisted of a semi-free living existence in the owner's well-fenced backyard. The ground surface was about half dry earth and half concrete patio. A wooden shelter was provided for sleeping. There was no evidence of exposure to pesticides, herbicides or other chemicals applied to the area, but the fact that all four feet were involved would tend to support a hypothesis of exposure-induced carcinogenesis.

*(Received for publication 14 February 1973)*