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## FIBROSARCOMA IN AN AFRICAN ELEPHANT

RICHARD J. BROWN,<sup>[1]</sup> JAMES L. KUPPER,<sup>[2]</sup> WALTER P. TREVETHAN<sup>[3]</sup> and NED L. JOHNSTON<sup>[4]</sup>

**Abstract:** A 4 year old female African bush elephant developed a slowly-growing mass of 6 months' duration on the medial aspect of the carpal area of the right front leg. Histopathological examination revealed a low grade fibrosarcoma.

### CASE REPORT

A 4 year old female African bush elephant, born in Mozambique and recently acquired by a South Florida Zoological Garden developed over a period of 6 months a 3 cm mass on the medial aspect of the carpal area of the right foreleg.

The lesion was removed under local anesthesia. It was fixed in formalin, embedded in paraffin, sectioned at 7 microns and stained with hematoxylin and eosin.

### PATHOLOGY

The tumor was not well encapsulated and demonstrated invasiveness and chronic inflammation at the expanding border (Fig. 1). The cellular pattern consisted of whorls of immature fibroblasts with a moderate amount of mature collagenous fibers. Most of the nuclei were round but many were spindle shaped. A few were hyperchromatic. A small number of mitotic figures was seen, and these seemed to be concentrated in perivascular locations. A few nodules of reticulo-endothelial cells were scattered

throughout the stroma. In some areas the tumor had a myxomatous appearance. The overlying epidermis was ulcerated. The tumor was considered to be of low grade malignancy.

### DISCUSSION

There is little written on fibrosarcomas in wild animals, however some correlation can be made from accumulated information on this tumor in other animals.

Fibrosarcomas are common in the dog but are not frequently seen in other animals. The legs are a commonly reported location in dogs.<sup>2</sup> This may also be true in certain wild animals, as in our case. The fibrosarcoma is generally considered to be a tumor of older animals but a 4 year old elephant is a relatively young individual. The myxomatous appearance of parts of this tumor might make one ponder the possibility of a viral etiology in such a young animal.<sup>3</sup> Pseudosarcomatous fasciitis is also a possibility in this case. Fibrosarcomas may metastasize, but usually do so at a slow rate.<sup>1</sup>

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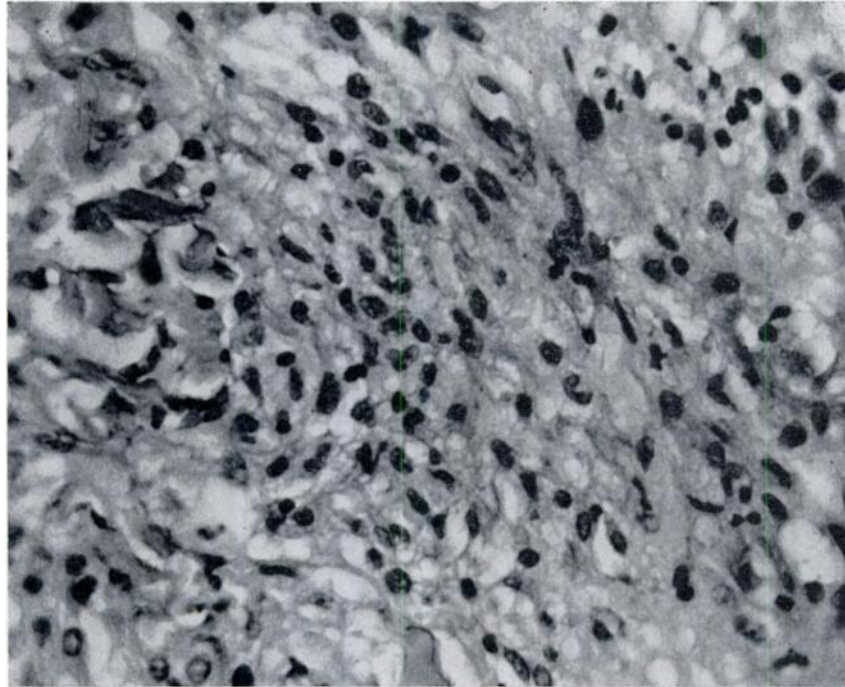


FIGURE 1. Fibrosarcoma of the skin of the leg in a 4 year old elephant. H & E, 650 X.

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