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VAGINAL FIBROMAS IN A BEAKED WHALE, *Mesoplodon densirostris*

J. O. FLOM,¹ R. J. BROWN,² R. E. JONES³ and J. SCHONEWALD⁴

Abstract: Necropsy of a mature female Blainville's beaked whale (*Mesoplodon densirostris*) revealed two vaginal fibromas.

CASE REPORT

Fibromas may occur in any fibrous connective tissue, and are commonly found in the dermis or subcutis.¹ Fibromas usually are found in mature or aged animals and have been reported in a wide variety of species,³ including marine mammals.^{1,2,4} This paper describes two vaginal tumors, diagnosed as fibromas, from a mature female Blainville's beaked whale (*Mesoplodon densirostris*). The authors are unable to find previous reports of neoplasia in this species.

The whale was observed trapped in the rocks near Pescadero State Beach, San Mateo County, California. Profuse bleeding from the snout area prompted a rescue operation, but the whale died before the rescue was completed. The cause of death appeared to be the result of severe trauma to the anterior snout. Extensive soft tissue damage and comminuted fractures of the maxilla and mandible were evident upon examination. The origin of the trauma was not determined. Examination of the urogenital tract revealed two vaginal tumors adjacent to the os cervix. The tumors were removed, fixed in 10% buffered formalin, embedded in paraffin, sectioned and stained with hematoxylin and eosin.

RESULTS

Both tumors were firm, grayish-white, stalked and pedunculated (Fig. 1). One mass was circular and measured approximately 1 cm in diameter while the second mass was ovoid and measured approximately 4.5 cm × 2.2 cm. Microscopic examination revealed an eosinophilic tissue with low cellularity, comprised mainly of mature collagen. No epidermal covering was evident (Fig. 2) and the cells present had indistinct outlines with a variety of nuclear morphology ranging from oval-tear-drop shapes to elongated and flat, typical of fibroblasts (Fig. 3). Some nuclei which were elongated and flat were also hyperchromic. Mitotic figures were not seen. Numerous neo-capillaries with their endothelial cells sloughed into the lumens were also evident. Based on the gross and microscopic features, the tumors were classified as fibromas.

DISCUSSION

Reports of neoplasia in cetaceans are limited, and of those available, most are from past decades and describe neoplasms in the commercially exploited baleen whales.² Only a few recent reports exist, and are primarily from small

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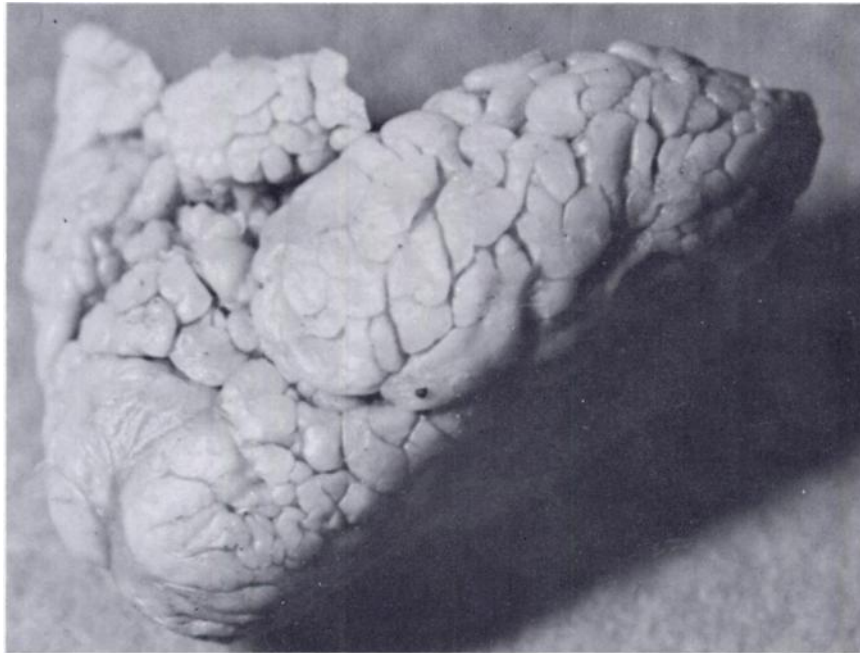


FIGURE 1. Photograph of tumor. Note lobulated appearance.

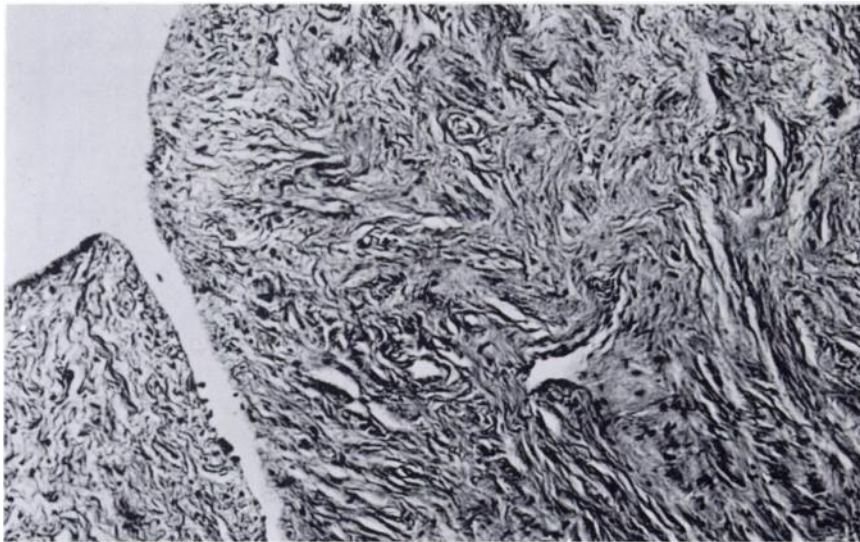


FIGURE 2. Section showing whorls and nests of fibroblasts and collagen. Also note absence of any epidermal covering. 63 \times .

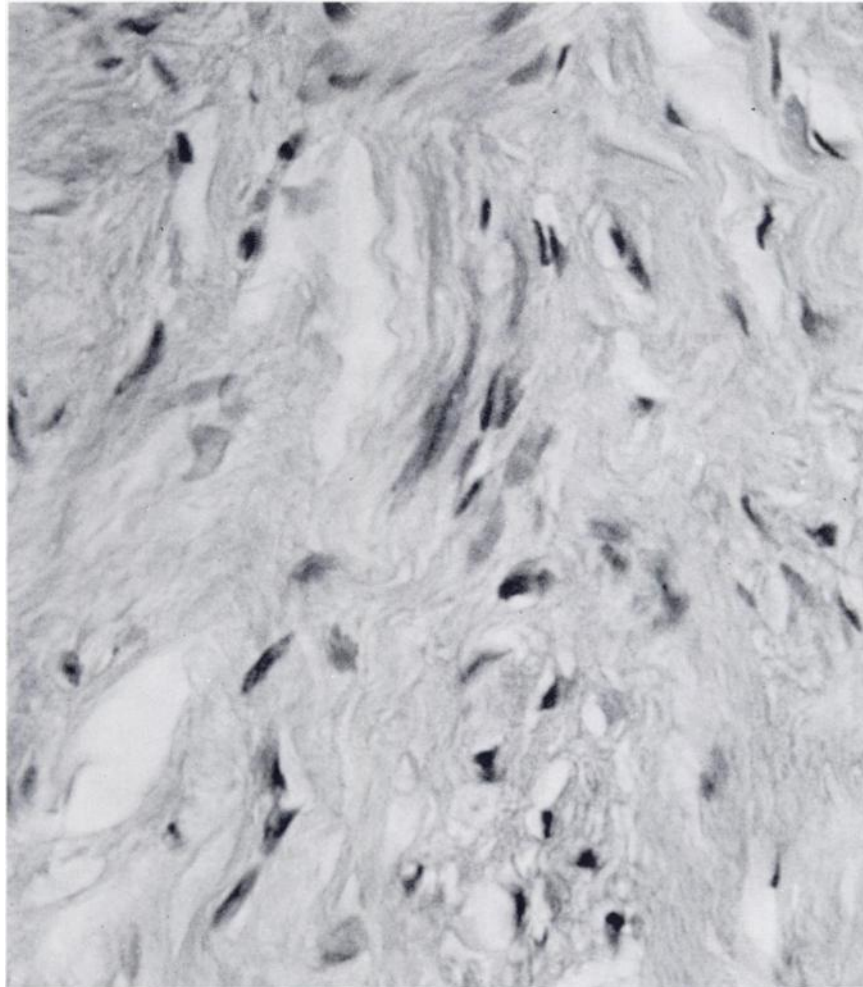


FIGURE 3. Section demonstrating the variety of nuclear shapes and indistinct cell outlines. 400X.

cetaceans held as exhibit animals.² Sightings and/or strandings of beaked whales are considered rare occurrences. In fact, the whale in the present report is

the first recorded of this species for the eastern Pacific Coast.³ This paper is an addition to the limited records of neoplasia in cetaceans.

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