

RETROVESICAL MALIGNANT FIBROUS HISTIOCYTOMA: REPORT OF AN AUTOPSY CASE

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Malignant fibrous histiocytoma is extremely rare. O'Brien and Stout¹⁰ reviewed 1516 cases of histiocytic tumors including 979 of fibrous xanthoma and dermatofibrosarcoma protuberans, and 537 of giant-cell tumors and villonodular synovitis of the soft tissues. Of these, only 15 cases had definite malignant lesion.

Histiocytic tumor is commonly located at the skin or the subcutaneous tissue although any site may be involved. Several cases of histiocytic tumor in the genitourinary system^{2,3,4,7,8,12} and at retroperitoneum^{1,5} have been reported.

This paper presents a case of malignant fibrous histiocytoma that was yielded as malignant by the needle biopsy specimens and was confirmed at autopsy.

CASE REPORT

A 63-year old man with a history of no previous disease was admitted to Osaka University Hospital for dysuria and constipation of a month's duration. On physical examination, a hard and smooth surfaced mass was palpated at the lower abdomen. Bimanual examination revealed that the tumor, as large as a child's head, was located at the retrovesical anterectal site. Routine laboratory data were normal except for slight pyuria.

An excretory pyelogram demonstrated a huge mass which cause lateral deviation and mild stagnation of bilateral ureters at the pelvic cavity (Fig. 1). The urinary

bladder was compressed anteriorly by this mass. Pelvic angiogram showed that the bilateral common iliac arteries were displaced laterally due to a large hypovascular mass lesion. Also, fine corkscrew-like tumor vessels with delayed emptying could be appreciated in the left-lower portion of the tumor (Fig. 2).

Histology of the transrectal needle biopsy specimens revealed that the tumor was composed of an admixture of fibroblastic cells and histiocytic cells with excessive collagen fibers. There were marked variations in the histologic pattern from area to area. In some, the fibroblasts were arranged in a typical storiform pattern as in fibrous histiocytoma (Fig. 3) while in the others they were arranged in broad fascicle without such pattern. Numbers of histiocytes with slightly eosinophilic cytoplasm and vesicular nuclei were arranged between the fibroblasts. Various numbers of bizarre giant tumor cells were scattered among the fibroblasts and histiocytes (Fig. 4). Mitosis was observed frequently. These findings were all consistent with the diagnosis of malignant fibrous histiocytoma.

The abdominal tumor increased so rapidly in size to occupy the whole lower half abdomen and to cause alimentary tract obstruction. The general condition of the patient deteriorated markedly that palliative colostomy was performed.

He died on Feb, 15, 1977, three months after admission. Autopsy findings were as



Fig. 1. Excretory pyelogram shows lateral deviations and mild stagnation of bilateral ureters. A huge mass at the pelvic cavity compress the urinary bladder anteriorly.

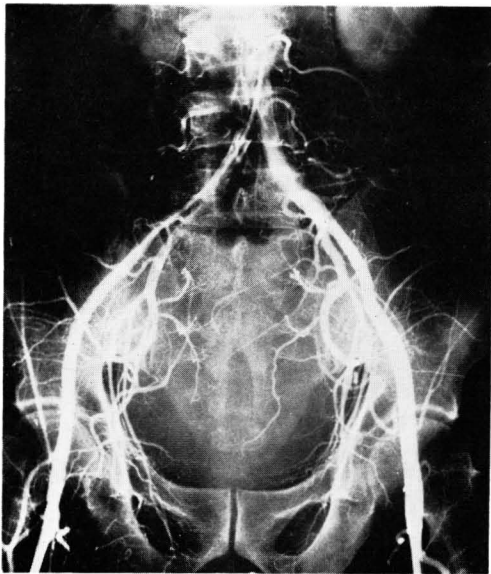


Fig. 2. Pelvic angiogram shows the lateral displacements of bilateral common iliac arteries by the large hypovascular lesion. Fine corkscrew-like tumor vessels with delayed emptying are observed in the left-lower portion of the tumor.

follows: The retrovesical tumor occupied the whole pelvic and lower abdominal cavity and seemed to originate from the deep perineal soft tissue. The tumor sized $28 \times 20 \times 8$ cm and weighed 2350 g en block with both bladder and rectum. No distant metastasis was found in the liver, spleen, lung, mesenterium, lymph nodes or elsewhere.

Microscopic findings of the tumor were almost the same as those obtained from the biopsy specimens. In addition, areas of massive necrosis and active infiltration into the rectal submucosa were observed.

DISCUSSION

A tumor that was composed of fibroblasts and histiocytes in various composition is now known as fibrous histiocytoma¹³⁾. Previously the malignancy of this fibrous histiocytoma was diagnosed, not by histologic feature, but principally by appearance of metastasis or local recurrence. Merkow et al.⁹⁾ have stated that only the electron microscopic observations might represent the malignancy of these tumors. However, Kempson and Kyriakos⁶⁾ and Soule and Enriquenz¹¹⁾ are convinced that there was a certain malignant form of fibrous histiocytoma that could be diagnosed histologically. They have stated that a soft tissue tumor with a histologic pattern of a storiform fibrous stroma, intermingled with plump fibroblast, bizarre giant histiocyte, and other giant cells, foam cells and frequent mitosis, was specifically distinguished as the malignant fibrous histiocytoma. The present case was diagnosed as malignant according to these criteria from biopsy specimens, and the autopsy findings of its active growth with infiltration, although no metastasis was found, confirmed its malignancy.

The definition of histiocytic tumors seem to vary depending on the fancy of the individual reporters. A proper classification of the terminology seems necessary to avoid confusion.

SUMMARY

This paper was presented a case of retrovesical malignant fibrous histiocytoma

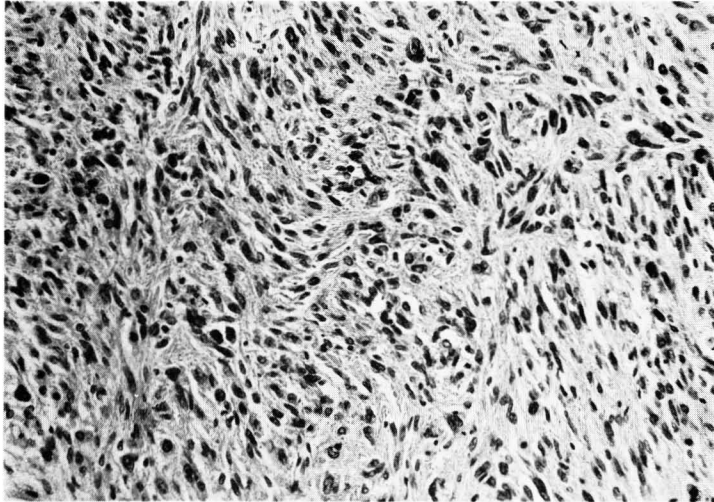


Fig. 3. Photomicroscopic figure shows a characteristic storiform pattern. Histiocytic cells are interspersed within the fibrous stroma. (H & E, reduced from $\times 200$)

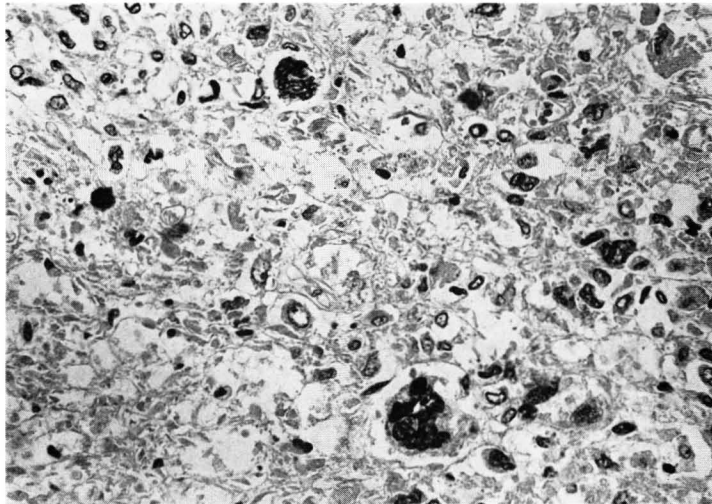


Fig. 4. Scattered bizarre giant cells are found throughout the lesion. Mitotic figures are frequently encountered. (H & E, reduced from $\times 400$)

with clinical manifestation of dysuria and constipation. The tumor grew so rapidly and fixed to the pelvic wall that only a palliative colostomy was able to be performed.

Preoperative transrectal needle biopsy specimens revealed histologically an admixture of fibroblastic and histiocytic cells, a typical storiform fibrous stroma, numerous bizarre giant cells with frequent mitosis. Judging from these histological features, the diagnosis was made as malignant

fibrous histiocytoma which was confirmed at autopsy.

The histopathological criteria of malignant fibrous histiocytoma were discussed briefly.

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和文抄録

膀胱後部に発生した悪性線維性組織球腫の1例

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小 林 晏

組織球由来と考えられる腫瘍には、さまざまな variation があり、その terminology は未だ明確には確立されていない。これらの腫瘍は主として皮膚および皮下軟部組織に発生することが多く、泌尿器科領域において経験されるのは比較的稀である。特に、悪性線維性組織球腫は、組織球由来の腫瘍の約1%を占め

るにすぎないといわれている。

今回、われわれは、排尿困難・便秘を主訴として来院し、生検により診断を確定し得た膀胱後部に発生した悪性線維組織球腫の1例を経験したので報告するとともに、悪性線維組織球腫の組織学的診断基準について、若干の文献的考察を加えた。