nancy of prostate in children under 10 yr old. In adults, the most common prostate sarcoma is leiomyosarcoma. Other types of sarcoma have been reported but the frequency is much lower. The prognosis of prostate sarcomas is usually poor. They are frequently resistant to any treatment. The prognosis of rhabdomyosarcoma in children has been improved by the combination of chemotherapy, radiotherapy, and surgery. However, the prognosis of rhabdomyosarcoma is discouraging in adults.

Clinical Diagnosis

Sarcoma in the right pleural cavity, most likely of prostate origin, and also with invasion to the urinary bladder and lumbar vertebrae via hematogenous and lymphatic spreading is a possible conclusion.

PATHOLOGICAL DISCUSSION

Microscopic examination of the first TURP specimen showed spindle cells with minimal atypia in the myxoid background. Lymphocyte and eosinophil infiltration was noticed. No obvious mitosis was found. There was focal necrosis. The entire histologic picture was compatible with chronic prostatitis. The second TURP specimen revealed the similar histologic picture with hypercellular areas mingled with hypocellular areas of proliferating spindle cells arranged in sheet-like pattern in the fibromuscular stroma. The spindle cells had monotonous and bland nuclei with no significant nuclear pleomorphism. Mitotic figures were uncommon (< 2 mitotic figures per 10 high-power field). Some scattered chronic inflammatory cells were seen. Focal myxoid change was noticed. Immunohistochemical study demonstrated that the spindle cells were positive for vimentin, equivocally positive for actin, but negative for desmin, S-100, and cytokeratin. The results meant that the spindle cells were mesenchymal cells in origin. However, no definite evidence was present to support the diagnosis of sarcoma. Coupled with the clinical information, inflammatory pseudotumor was more favored than sarcoma. The subsequent specimen taken from the right pleural cavity showed a picture of sarcoma made of pleomorphic spindle cells with frequent mitoses including atypical forms (Fig. 2). A panel of immunohistochemical study revealed no further differentiation of the arcoma. Before a more detailed survey and treatment could be performed for the possible prostate sarcoma, the patient died of respiratory failure.

An autopsy was undertaken; it was found that the prostate was enlarged and almost totally replaced by a yellowish to greenish tumor (Fig. 3). On cut surface, the tumor had a glistening, gelatinous, and rubbery appearance. It showed extensive necrosis and hemorrhage, especially in the central portion. The tumor had directly invaded the urinary bladder, pelvic soft tissue, and rectum, as well as having encased the bilateral seminal vesicles and vas deferens.

The liver was enlarged. There were 10 yellowish to tan tumorous nodules measuring up to 1 × 0.8 × 0.8 cm

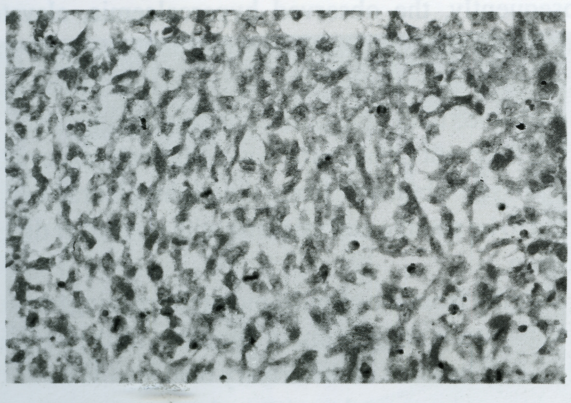

Fig. 2. Spindle cell sarcoma in the pleural cavity consisting of pleomorphic spindle cells. Note frequent mitotic figures in the center (H&E 400X).

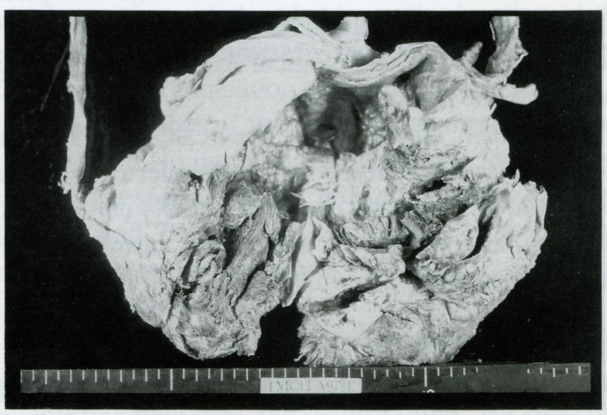

Fig. 3. Prostate almost totally replaced by a yellowish to greenish tumor with marked hemorrhage and necrosis, and invasion of the urinary bladder.