Case Report 60

George A.Y. El-Khoury, M.D., and Michael Bonfiglio, M.D.*
Departments of Radiology and Orthopedic Surgery, University of Iowa Hospitals and Clinics, Iowa City, Iowa, USA

History

This 47-year-old man, known to have hereditary, (familial), multiple osteocartilaginous exostosis, presented because of an enlarging abdominal mass which he had noted four months previously. He complained of marked abdominal distention within a half hour after meals and also noted numbness in the left thigh. On physical examination a large mass occupying the entire left side of the abdomen from the diaphragm to the pelvic brim was palpated. Hypesthesia of the anterolateral portion of the left thigh was present.

Surgical exploration was performed.

Fig. 1A and B. A An anteroposterior film of the abdomen during an exploratory urogram shows a large soft tissue mass in the left side of the abdomen. The mass contains considerable amorphous and flake-like calcifications, particularly in the upper two-thirds, with larger calcifications in the lower segment. The left kidney is displaced superiorly and compressed against the diaphragm, suggesting that the mass is retroperitoneal. B An anteroposterior roentgenogram of the pelvis shows several bony exostoses arising from both femoral necks and the area of the base of the left ilium. Modeling deformities of the femora are observed.

Fig. 2. A computed axial tomographic section obtained at the level of the first sacral segment demonstrates graphically the soft tissue mass in the left side of the pelvis. Extensive flake-like calcifications are contained within the mass, which appears to be arising from the exostosis of the ilium.
Pathological Findings

The specimen weighed almost two kilograms (four pounds) and measured $22 \times 15 \times 13$ centimeters. The large cartilaginous surface was irregular in areas. The tumor was attached to the $10 \times 6$ cm. segment of ilium by a stalk of bone (Fig. 3 A).

Fig. 3A and B. A The tumor is noted to be attached to a segment of ilium by a stalk of bone. B A cut section of the lesion shows white to blue cartilaginous tissue with areas of gritty calcification. The arrow points to the site of tumor attachment.

Fig. 4. A photomicrograph (H and E stain—intermediate power) of a histological section from the lesion shows individual tumor cells (at times multinucleated and fairly well differentiated) to be arranged in nodules, with well circumscribed margins.