

LEIOMYOSARCOMA IN THE SKIN

A Case Report

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Abstract. Leiomyosarcomas of the skin and subcutaneous tissue are considered very rare neoplasms. The authors describe a case of leiomyosarcoma located in the skin of the anterior abdominal wall and presenting as two firm rather delimited nodules recovered by non-ulcerated skin. Treatment consisted of the complete removal of the tumour accompanied by extensive excision of the uninvolved tissue around the nodular mass.

Cutaneous leiomyosarcomas are considered uncommon neoplasms (5). Stout & Hill (7) gathered 35 examples of subcutaneous and cutaneous leiomyosarcomas at the Laboratory of Surgical Pathology of Columbia University, USA, up to the year 1956. One-third of these tumours were found in the lower extremities and approximately one-fourth were located in the neck and head area. In one of the reported cases the tumour occurred primarily in the abdominal wall. Other examples of cutaneous leiomyosarcomas have occasionally been reported in the literature (1, 3, 4, 5).

The following report is of a case of cutaneous leiomyosarcoma located primarily in the anterior abdominal wall and treated surgically.

CASE REPORT

E. O., a sixty-one-year-old mulatto woman was admitted to the University Hospital in Paraiba, Brazil, with a tumour mass located in the anterior abdominal wall of 2 years' duration. This tumour was removed 2 years ago but it recurred 1 year later. A second excision of the tumour mass was also followed by a recurrence shortly afterwards.

Physical examination disclosed two contiguous nodular masses located in the anterior abdominal wall (Fig. 1) one of which is freely movable on the underlying structures. The greater mass is firmly attached to the subja-

cent anatomical planes. Surgical treatment consisted of the complete removal of the tumour, plus the excision of a generous amount of uninvolved tissue around the tumour mass.

The surgical specimen measured 14 × 12 cm and was covered with non-ulcerated congested skin. The cut surface of the tumour showed whitish fleshy tissue exhibiting multifocal areas of hemorrhage and necrosis (Fig. 2). A portion of the rectus abdominis muscle was firmly adherent but not invaded by the tumour. Histologically the tumour was formed by a proliferation of long, spindle-shaped cells arranged in bundles and strands (Fig. 3), with elongated nuclei (Fig. 4), and eosinophilic cytoplasm showing longitudinal myofibrils. Mitotic figures were a prominent feature (Fig. 5). Cellular pleomorphism was limited to some areas where atypical giant cells with bizarre nuclei were seen (Fig. 6). The tumour was highly vascularized.

COMMENTS

Malignant smooth muscle tumours have often been observed in the uterus, round ligament, gas-



Fig. 1. Leiomyosarcoma in the subcutaneous tissue, located in the anterior abdominal wall.

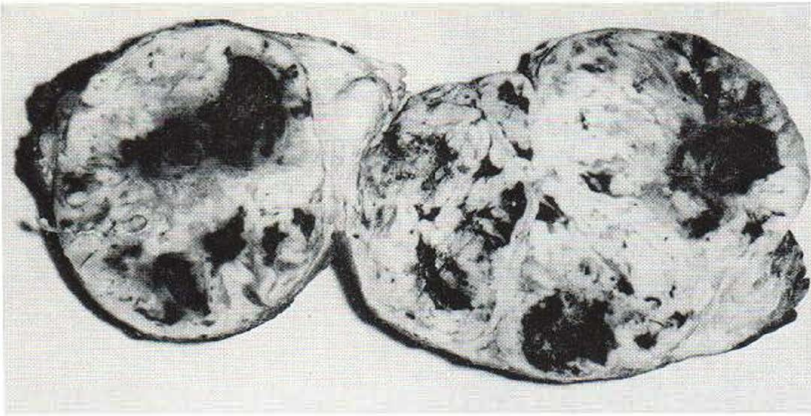


Fig. 2. Cut surface of the nodular mass.

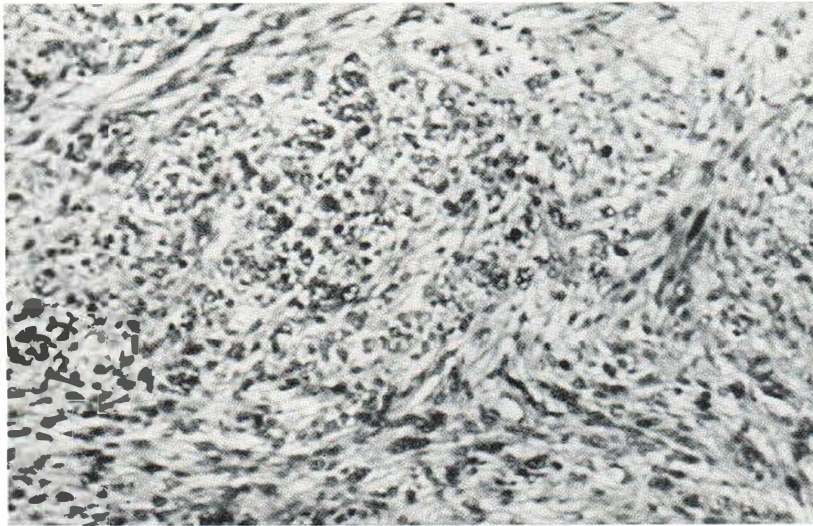


Fig. 3. Leiomyosarcoma formed by spindle-shaped cells in bands forming an interlacing pattern, H & E, $\times 117$.

trointestinal tract, retroperitoneum and less frequently in the genitourinary tract and large blood vessels. Leiomyosarcomas primarily arising in the skin have been considered rare lesions (3, 5).

These tumours seem to develop in the underlying subcutaneous tissues where they form solid rounded or irregular masses which can be firmly attached to the subjacent structures. Histologi-

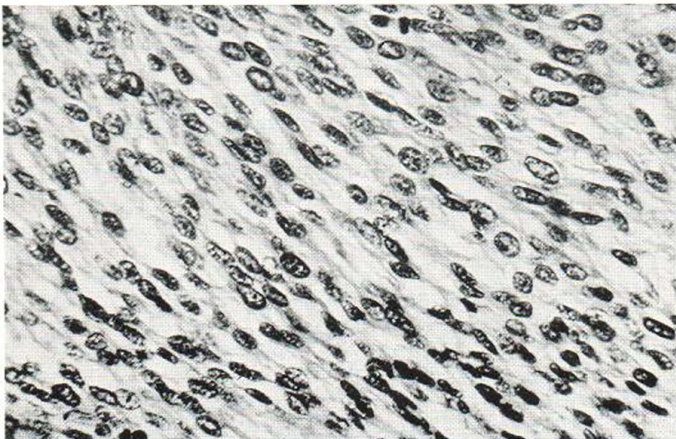


Fig. 4. Proliferation of elongated cells showing intra-cytoplasmic myofibrils and hyperchromatic nuclei. H & E, $\times 315$.

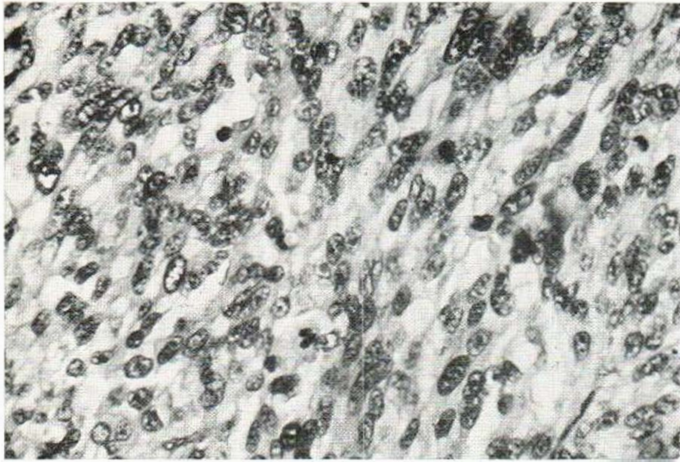


Fig. 5. Undifferentiated cellular area showing many mitotic figures. H & E, $\times 315$.

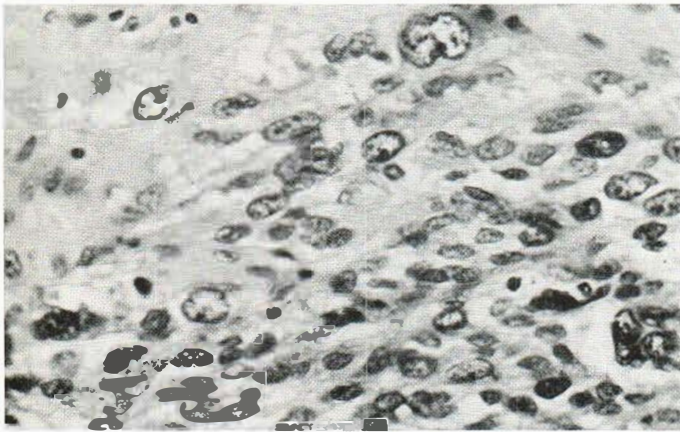


Fig. 6. Area of cellular atypia showing large bizarre hyperchromatic nuclei. H & E, $\times 315$.

cally they are formed by a proliferation of spindle-shaped non-striated cells forming interlacing bundles. In some areas one can observe atypical pleomorphic elongated cells. Mitotic figures are commonly seen and have been considered the most important criterion of malignancy (7). Metastases are usually late and slow, the blood stream being the favourite route for their embolic dissemination (7). Regional lymphatic metastases have rarely been observed (2, 6, 7). Only surgical treatment offers good prospects of cure. It should consist in the removal of the tumour bearing area accompanied by a generous amount of uninvolved tissue surrounding the tumour (7).

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