MIXED MESENCHYMAL SARCOMA*

(A Case Report)

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Uterine sarcomata are rare tumours which arise most frequently after the age of 40, the highest incidence being in the fifth decade and they are very rare before 30 years of age.

This case of "Mixed mesenchymal sarcoma" is worth recording, both because of its rarity and its occurrence at a young age.

Case Report

Miss P. P. B., age 23 years, was admitted on 11-2-1967 with bleeding per vaginam for one month, pain in abdomen and left leg. Her first menstrual period started at the age of 12 years. Since then the periods were coming at an interval of 15-20 days and were prolonged, profuse and painless.

On 21st January 1963, she had a profuse bout of bleeding which continued for almost a month. She then consulted a gynaecologist. At that time the uterus was about 2 months' size and firm. A cervical polyp was removed under anaesthesia, but a sound could not be introduced into the uterine cavity. A submucous fibroid was suspected and she was advised laparotomy. She was again examined after one month and at this time the uterus was found to be of normal size.

After this episode, she remained healthy and had regular periods with moderate flow for two years.

Again in December 1965, she started getting profuse painful periods. In October 1966, she noticed hardness and fullness in her lower abdomen for the first time. She was examined by a gynaecologist at Navsari. The uterus was the size of two months' pregnancy, firm, and a necrotic mass was seen protruding through the external os. The mass was removed and a dilatation and curettage was done on 16th November 1966.

Histological report of the curetted material was "Non-specific infected tissue". The patient was well for one month. In January 1967, she again started getting profuse bleeding per vaginam. At this time, she had fever, severe pain in the abdomen and severe backache. There was a sudden increase in the size of the uterus. She was admitted under our care on 11th February 1967.

On examination the patient looked very ill and pale. Pulse 120 per minute, B.P. 120/80 mm. of Hg.; temp-100 F; Hb-6 gms% W.B.C.—12,500 cm.

Per abdomen: Fullness in lower abdomen. There was a regular smooth mass arising from the pelvis, about the size of a 4½ months' pregnant uterus; it was fixed. There was another oblong mass in left iliac region, very tender and fixed.

Vaginal examination:— Cervix small, firm. Uterus 4½ months size, A. V., firm fixed. Rt. fx. clear. Left fx. fixed, tender mass felt high up.

Provisional Diagnosis:— Fibromyoma with inflammation.

Treatment:— As the general condition of the patient was poor and as she was very anaemic, she was treated with hor-

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mones to check bleeding and haematinics. Antibiotics were given for inflammation.

A laparotomy was performed on 3-3-67 under spinal anaesthesia. On opening the abdomen, two nodules were found in the omentum which were removed for biopsy. There was a big mass in the left iliac fossa, adherent to the omentum and the intestines; the mass was haemorrhagic and friable. An attempt was made to remove as much of the mass as possible.

The uterus was uniformly enlarged to about the size of a 4½ months' pregnant uterus. Since a submucous fibromyoma was suspected the uterus was opened anteriorly. There was no fibromyoma. All that we could find was an unusual hypertrophy of, both endometrium and myometrium which had led to such an increase in the size of uterus. The endometrium was about 1" thick, firm and glistening white. Some part of the endometrium and myometrium at the fundus was removed and the uterine cavity was closed in layers. Both tubes and ovaries were normal. She had no bleeding per vaginam during her post-operative period, but pain in the left leg and left iliac region persisted. She was discharged on 13-3-67 on the tenth day after operation and was advised to go to the Tata Memorial Hospital for further treatment of irradiation and chemotherapy.

X-ray—Chest normal. X-ray—Pelvis and hip joints normal. There was no evidence of secondaries anywhere.

Pathological Report:— (Photographs 1, 2).

The sections taken from various parts of the tumour showed only a few surviving endometrial glands amidst a very cellular and pleomorphic stromal tissue.

The stromal cells were spindle shaped for most of the part, but there were areas of round cells also. The cells showed hyperchromatic nuclei as well as a nucleo-cytoplasmic disproportion. There were many giant cells with multiple nuclei; unusually big-sized cells were also seen.

The most peculiar finding was the presence of many elongated cells with bright pink cytoplasm, broader at one end and tapering at the other (tadpole-shaped). These showed cytoplasmic cross-striations similar to striped muscle.

The tumour also showed fatty tissue and areas of mucoid degeneration.

The tumour was seen infiltrating into the myometrium. From this picture the tumour was diagnosed as a "Mixed Mesenchymal Sarcoma".

The patient was given irradiation therapy at Tata Memorial Hospital, Bombay. A total dose of 3000 r. was given by cobalt beam therapy between 22nd March and 4th May 1967. She had severe pain and stiffness in the lower abdomen, vomiting fainting and loss of appetite. She had retention of urine off and on.

Chemotherapy was started after irradiation with leukeron tablet (chlorambucil 2 mg. per tablet), one tablet three times a day for 3 weeks.

The patient came to us again after about five months, on 17-7-67. She looked very ill and anaemic. She was getting severe dysuria, retention of urine off and on, severe backache and stiffness of the abdomen, severe nausea, vomiting and loss of appetite.

Per abdomen there was generalised fullness of the abdomen and a firm mass was felt above the symphysis pubis about the size of a four months' pregnant uterus. There was generalised rigidity and tenderness.

On vaginal examination a firm mass in connection with uterus, about 4 months' size, was felt in the anterior fornix. It was fixed and tender. There was tenderness in all the fornices.

Since then her general condition started deteriorating and she expired at home on 2nd August 1967.

Discussion

This tumour arises in the endometrium and is composed of neoplastic stromal elements or an admixture of stromal and epithelial elements. Its histogenesis is still controversial. It is a pale, polypoid fleshy tumour, usually arising from the uterine fundus. Occasionally there may be myometrial invasion. Usually the tumour is fairly sharply demarcat-

ed from the normal endometrium and only rarely is all the endometrium involved.

Microscopically

It is composed of cells which are spindle shaped on longitudinal section and round on cross section; the cytoplasm may be scanty. The cells resemble those of the endometrial stroma in the proliferative phase. There may be giant cells (not to be confused with placental site giant cells or with the foreign body giant cells). The higher the mitosis, the poorer the prognosis. Spread of the growth is usually by direct invasion. Though spread through the blood stream is of frequent occurrence, spread via lymphatics is rare. The commonest sites of distant metastases are the liver and lungs.

Treatment and Prognosis

The commonly employed method of treatment is radical hysterectomy with irradiation. There is hardly any benefit from the latter method since these tumours are usually radioresistant. However, it may be tried with the hope that in some occasional cases it might help. Recently, chemotherapy has also been tried, but with poor results.

The great majority of the cases die within 2 years and very rarely do they survive longer than this duration.

In this case, menorrhagia started in 1963 and the uterus at that time was bulky. Whether the growth started at this time cannot be said with certainty. From the history and clinical findings, it appears that the growth started in 1965 and by the time she came under our care, she had already developed secondaries. An interesting feature in this case was that the whole of the endometrium was involved, an uncommon occurrence. This patient had no relief, either with irradiation or with chemotherapy. Could an early laparotomy and radical surgery have given a better prognosis?.

Summary

1. A report of a case of "Mixed Mesenchynal Sarcoma" in a young girl is given.

2. The pathology, treatment and prognosis are discussed.

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Figs. on Art Paper V