

SARCOMA OF THE UTERUS—REMARKABLE RESPONSE TO CHEMOTHERAPY

(A Case Report)

by

AJAY K. GHOSH,* M.O. (Cal.), M.R.C.O.G.

Sarcoma of the uterus is one of the highly malignant tumours of the female genitalia. The treatment of sarcoma is controversial and far from satisfactory. Radiotherapy and surgery independently and in combination have been given extensive trial. Jeffcoate (1967), states, "The only hope for the patient is to carry out total hysterectomy with removal of the appendages. Wertheim's and even more radical operations are pointless; it may not even be worthwhile to remove the ovaries. If the growth is localised, hysterectomy is sufficient to cure but if it has already disseminated in the blood stream, the outlook is hopeless, irrespective of the treatment". Unfortunately, the dissemination of the malignant cells in sarcoma is so early that the prognosis following surgery is rather disappointing. In the present state of our dilemma there is some hope that the chemotherapeutic agents may be a better alternative. However, contrary to our expectation, these drugs could not do much good either. As a search through the available literature did not reveal any success of chemotherapy in uterine sarcoma, it is considered worthwhile to report the following remarkable response in such a case.

Case Report

Mrs. C. D. aged 73 years, 11th para

*Associate Professor of Obst. & Gynec.,
National Medical College, Calcutta.

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widow for 6 years, having menopause for the last 25 years was admitted to the hospital on 27th of December, 1967 complaining of swelling of her right leg since two weeks. She also complained of extreme anorexia, indigestion, general failure of health and sickness for quite some time. Her previous menstruation was normal and she had her menopause 25 years ago. She was thinly built and her nutritional status was poor. She had marked pallor with oedema of the right leg.

The pulse was 70 per minute, the temperature 98°F, and the blood pressure 160/90 mm of Hg. The cardiovascular and nervous systems were normal.

On abdominal examination the inguinal glands were enlarged on the right side and felt hard and discrete. A suprapubic hard, somewhat irregular mass, was felt arising from the pelvis and extending to about three inches below the umbilicus. The mobility of the mass was restricted from below upward. There was no tenderness and the mass was dull on percussion. There was no free fluid in the peritoneal cavity. The liver and spleen were not enlarged.

Pelvic examination revealed a small introitus and a narrow vagina with a small cervix consistent with post menopause. The hard abdominal mass was found to be adherent to the uterus which seemed to have been pushed posteriorly and to the left. On the right side a separate hard mass was found which extended quite close to the pelvic wall. The pouch of Douglas felt somewhat thick and irregular. On rectal examination the mucosa was free and the parametrium was not involved. A provisional diagnosis of an ovarian carcinoma was made.

Investigations: Haemoglobin was 60

per cent with red blood corpuscles 3.58 million per cmm. White blood cells was 9700 per cmm.; neutrophils 78 per cent, lymphocyte 18 per cent, and eosinophils 4 per cent. Blood sugar was 86 mg per 100 ml (fasting level) urea, 26.0 mg per cent, non-protein nitrogen 28.0 mg per cent. There was no abnormal constituents in her urine. Chest X-ray and electrocardiogram were normal.

The patient received 1,000 ml of blood transfusion in a week before the operation.

Operation: Laparotomy was done under epidural block. The mass was found to be uterine in origin. It looked haemorrhagic like raw meat. The enlargement corresponded to about 20 weeks pregnancy size, the surface was irregular with prominent vessels and the mass felt hard. The tubes were normal and the ovaries were very atrophic and small. The infundibulopelvic folds of peritoneum were rather short with large number of vessels running through it. The bladder musculature was very thick, friable and looked haemorrhagic, and the uterovesical pouch was very thick and densely adherent with the uterine growth. The right iliac group of glands were enlarged and matted together to form a mass like a hard cricket ball, pressing on the iliac vessels which apparently resulted in the unilateral oedema of the leg. In view of these findings and in consideration of the age of the patient, the operation was abandoned. A provisional diagnosis of sarcoma of the uterus (fibrosarcoma) was made. A small biopsy was taken from the uterine growth and the abdomen was closed which subsequently healed well. Histological report revealed round cell sarcoma of the uterus (Figs. 1 and 2).

Post operative course: The swelling of her right leg considerably increased in course of next two weeks and her left leg was also swollen. The anorexia and the dyspeptic symptoms were worse than before. In the absence of anything better to do it was decided to give trial to chemotherapy. Cyclophosphamide (Endoxan), an alkylating agent was used.

Dosage Scheme: Inj. Cyclophosphamide (200 mg) was started intravenous daily from the 18th post operative day and con-

tinued for two weeks. The treatment was controlled by frequent examination of the blood with special reference to leucocyte count. There was surprisingly dramatic response to the treatment. Within a week she had a sense of well being, the oedema became less marked, her appetite improved and she emphatically said that for the last many months she was never so well. The abdominal mass also underwent some regression. At the end of two weeks there was complete regression of the abdominal mass, the right iliac glands were no longer palpable on deep palpation per abdomen and the oedema of the legs subsided completely. Pelvic examination at this stage revealed the uterus somewhat bulky, about 8 to 10 weeks size. The blood examination during this period showed a variation of the haemoglobin level from 65 to 70 per cent and the white blood cells count ranged between 5,000 to 11,000 per cu.mm. In fact, during the first week of the therapy, there was a temporary leucocytosis followed by gradual depression subsequently. During this period the patient received 600 mls. of blood transfusion.

However, at this stage after receiving a total dose of 2,800 mg. of cyclophosphamide, the patient had a rise of temperature of 101°F, which could not be controlled by antibiotics until the chemotherapy was discontinued for a week. Oral chemotherapy was started after the patient was afebrile. Cyclophosphamide (50 mg) tablet was given three times a day and continued for a week (total of 1,050 mg) but she had anorexia and vomiting during this oral therapy and intravenous therapy was started. A further dose of 200 mg daily was given for ten days from 16-2-68 to 27-2-68. She received another blood transfusion of 600 mls. The patient again felt well and her appetite improved. By this time she received a total dose of 5,850 mg of cyclophosphamide and she was discharged from the hospital on 28th of February, 1968. At the time of the discharge from the hospital, she had no swelling of her legs, or abdominal mass and pelvic examination revealed a normal sized uterus with a very small cervix consistent with post menopause. On 28th March, 1968, she reported for check-up examination and complained of anore-

xia and pain in the abdomen. She had moderate degree of alopecia, her weight was 30 Kgs. and she had moderate degree of pallor. Her haemoglobin was 60 per cent and the blood pressure 175/85 mm of Hg. There was no oedema of her legs neither any abdominal swelling. The uterus was very small anteverted mobile with cervix almost flushed with the vaginal vault. There was no abnormal vaginal discharge, neither any pelvic mass. Endometrial biopsy was taken with Sharmann's curette without anaesthesia. The uterine cavity felt smooth and only scanty mucoid-like material could be removed, which was subsequently found to be a mixture of blood and mucus on histology. Cyclophosphamide twice daily was started, antianaemic therapy was continued and the patient felt better within 48 hours.

For the next four weeks she was keeping well and subsequently the patient discontinued the pills due to increasing anorexia and nausea and the patient died at the end of six months.

Discussion

The most interesting point which could be made from this case is the dramatic response to chemotherapy in sarcoma of the uterus. From the available literature one is tempted to believe that chemotherapeutic agents do not seem to work in uterine sarcoma, although it works on reticulosarcoma, lymphosarcoma and other types of malignancy, particularly in connexion with the ovary. The case reported here seemed inoperable and it was associated with distressing features like intense pain, anorexia and general sickness. With chemotherapy there was complete regression of the uterine growth, enlarged iliac glands and perfect symptomatic improvement with disappearance of oedema. The drug Cyclophosphamide, an alkylating agent is only activated in the body and is supposed to have a relatively low toxicity and wide margin of safety. However, the continued oral use of the drug was associated with

a good deal of anorexia and nausea and it had to be discontinued, and the need for some oral preparation well tolerated by the patients cannot be too strongly emphasised. Alopecia was another toxic manifestation observed in this case, and this would appear to be a great disadvantage for using this drug in young women. However, there was almost no hope for this women aged 73 and she had wonderful response to chemotherapy, although for a short period. No doubt, the symptomatic relief induced by the drug made her existence comfortable for quite some time before she died six months after discharge from the hospital. Since the cases of sarcoma of the uterus are relatively rare, one does not get enough opportunity to acquire a good deal of experience of dealing with such cases. Having had limitation of knowledge one has to gain by trial and error. In view of the remarkable response to chemotherapy, although short lived, it is hoped that further trial may be worth while.

Summary

An inoperable case of sarcoma of the uterus (about 20 weeks pregnancy size), with glandular involvement (iliac glands) causing oedema of the legs by local pressure in a woman aged 73 was treated with cyclophosphamide with dramatic effect. A total of 5850 mg of the drug was given during a period of 5 weeks. The uterine enlargement retrogressed and the uterus became very small, anteflexed anteverted and mobile. There was also retrogression of the glandular enlargement with subsequent disappearance of the oedema and complete relief of subjective and objective symptoms. Alopecia was marked at the end of four weeks. With continued oral therapy progressive anorexia and nausea were disturbing side effects for which the

therapy had to be discontinued. The patient died six months after discharge from the hospital. However, chemotherapy made her existence comfortable for quite some time before death.

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References

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See Figs. on Art Paper II