RHABDOMYOSARCOMA OF THE CORPUS UTERI WITH INVERSION UTERUS

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Although rhabdomyosarcoma is not uncommon in other locations (bladder, limbs, heart, abdominal wall, testes, spermatic cord, sarcoma botryoides of the cervix in children), it is rarely found as a primary tumour in the corpus of the uterus. There have been only 49 such tumours recorded in the literature. Of these only 1 case reported by Donker *et al* (1972) was associated with inversion uterus.

Rhabdomyosarcoma of the corpus uteri is a highly malignant tumour consisting of rhabdomyoblasts in varying stages of development and often containing striated muscle fibres.

Because of the relative rarity of pure rhabdomyosarcoma of the uterus and the extremely convincing microscopic picture observed in our case, we found it worth reporting.

CASE REPORT

Mrs. V., a 67 year old Hindu widow, Para II, had normal menopause at 54 years of age. She attended the Gynaec. OPD at the All India Institute of Medical Sciences Hospital in the first week of February, 1975, with the complaint of postmenopausal bleeding for 6 months. She gave history of epilepsy for the last 30 years and had suffered from myocardial infarction 6 months prior to the visit. She had attended another hospital in Delhi in January 1975 for the above complaints where a provisional diagnosis of fibroid polyp was made and a curettage was performed which did not yield any tissue for definite diagnosis. She was advised hysterectomy, and she came to the Institute for a second opinion.

General physical examination was within normal limits. Systemic examination did not reveal any abnormality. Pelvic examination revealed cervix in mid position smooth. A small soft polp, ½" in diameter and 1" in length was felt protruding through the external os. The uterus was retroverted, multiparous size and mobile, lateral fornices were clear. On speculum examination the polyp appeared reddish brown in colour. A provisional diagnosis of malignant polyp was made and the patient was advised admission for further treatment. She refused admission at that time.

One and half months later on the 25th March 1975, she was admitted as an emergency complaining of severe agonizing pain in lower abdomen, extreme difficulty in passing urine, constipation and offensive vaginal discharge of blackish necrotic material for 4 days.

General physical and systemic examinations did not reveal any abnormality. There was marked tenderness in the lower abdomen but no mass could be felt. Pelvic examination showed normal external genitalia. There was a large polypoid mass with irregular surface protruding into the vagina and almost filling it completely. It was about 5" in diameter and covered with blackish yellow slough. Cervical lips and the body of uterus could not be defined. Lateral fornices were clear but the patient was extremely tender on examination.

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A provisional diagnosis of inversion of uterus due to malignant fundal polyp was made. The patient was started on antibiotics, urinary antiseptics, potent analgesics and vaginal instillation of glycerine acriflavine. Routine investigations were carried out. Hb. 10.4 Gm., routine and microscopic urine—NAD; Blood sugar Fasting—90; mg% Postprandial-104 mg% Blood urea-28 mgm% E.C.G. revealed changes consistent with a severe old myocardial infarction.

She continued to have severe pain in the abdomen inspite of the administration of potent analgesics. The mass filling the vagina descended further outside the introitus. Four days after admission, she started profuse bleeding from the growth and hence it was decided to undertake an emergency examination under anaesthesia and perform polypectomy or hysterectomy. Examination under general anaesthesia confirmed the diagnosis of fundal growth with total inversion of the uterus. A small piece from the tumour was sent for frozen section. However, as there was history of severe myocardial infarction and presence of severe infection prolonged anaesthesia and radical surgery were avoided. Amputation of uterus was carried out, and the entire growth was removed and bleeding controlled by the quick palliative procedure.

Histopathological examination of the growth showed malignant mesenchymal tumour compatible with embryonal rhabdomyosarcoma. The resected edges of the uterus were free of the tumour.

The postoperative period was uneventful except that she used to complain of difficulty in passing urine for which urethral calibration and dilatation was performed on the 10th postoperative day by the urologists and her symptoms were relieved.

She was started on Mitomycin—C on the 3rd postoperative day, a dose of 10 mg given twice a week as intravenous infusion. A total dose of 40 mg was given. Postoperative pelvic examination was normal. The cervical stump appeared healthy. Chemotherapy was followed by a course on external irradiation. She continued to come for follow up every month and was found to have no evidence of recurrence and was asymptomatic for eight months. In the ninth postoperative month she started having pain in the upper abdomen. Abdominal examination revealed a mass in the right lumbar region. Pelvic examination did not reveal any evidence of local recurrence. Patient was restarted on Mitomycin-C. A barium meal, chest X-ray and X-ray of long bones were carried out. Unfortunately, she expired on 29th December 1975, nine months postoperatively.

Discussion

The prognosis of these tumours is extremely poor. There is very little response to radiotherapy, and surgery is the treatment of choice in operable cases.

The cases reported by Clay *et al* (1952), Kulka and Douglas (1952) and Chaves (1966) are of interest because of the co-existence of rhabdomyosarcoma with adenocarcinoma of the cervix adenocarcinoma of the corpus uteri, and squamous cell carcinoma of the cervix respectively.

More cases have been reported in the recent years by Middlebrook and Tennant (1968), Srinivasa and Satyabhama (1968) and Donker's *et al* (1972). Only 1 case has been so far found associated with complete inversion of uterus.

The present patient was fairly well with the palliative surgery and radiotherapy for eight months, after which she developed a secondary in the right lumbar region. There was no metastasis in the pelvis.

A repeat elective operation for removal of adnexae and cervical stump probably would not have improved her prognosis, since life expectancy even after complete surgery is not more than 1 year, because of the rapid haematogenous spread of the tumor. On the contrary, it might have exposed her to immediate operative hazard in view of the history of severe myocardial infarction.

Summary

One case of Rhabdomyosarcoma causing inversion of uterus is presented and the literature is reviewed.

References

1. Clay, C. B., Evans, R. L. and Synder, J. W.: Am. J. Surg. 83: 600, 1952.
2. Donkers, B., Kazzas, A. B. and Meijering, H. J.: Am. J. Obstet. Gynec. 114: 1025, 1972.
3. Kulka, E. W. and Douglas, G. W.: Cancer, 5: 727, 1952.
4. Middlebrook, L. E. and Tennant, R.: Obstet. Gynec. 32: 537, 1968.
5. Srinivasa, R. K. and Satyabhama, R. R.: J. Obstet. Gynaec. India, 18: 793, 1968.