MIXED MESODERMAL (MULLERIAN) TUMOUR OF CERVIX

(A Case Report)

by

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Introduction

Mixed mesodermal tumours are known to occur in patients of all age groups, but predominantly in infants and children. Common site of origin is the vagina and vulva in children, cervix and body of the uterus in reproductive age group and body of uterus in postmenopausal women. In advanced cases, the growth may fill the vagina with extension into cervix, uterus, parametrium and abdomen. In such cases, site of origin is difficult to demonstrate. This report deals with a case in which the tumour was shown to originate in the cervix.

CASE REPORT

S.D., 39 years old female was admitted on 17-12-1978 with complaints of irregular bleeding for 4 months and passing grape like structures along with blood clots occasionally. She had amenorrhoea for 3 months preceding the bleeding.

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She was married for 25 years. Her menarche was at the age of 13 years, cycles were regular, 3-5 days with moderate flow and no pain.

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She never conceived.

On examination, she looked extremely pale. Heart and lungs were normal. Per abdomen, uterus was felt just above the pubic symphysis. On local examination, there was an irregular mass 6″ x 10″ with grape-like structures of varying sizes which was lying outside the introitus. (Fig. 1). Cervix could not be visualised.

On pelvic examination, the mass was arising from the posterior lip of the cervix on its left side extending to the anterior lip and was attached to it by a broad pedicle. Vagina was free. Uterus was 10-12 weeks' size, mobile and firm. Parametrium was free.

A clinical diagnosis of grape-like sarcoma of the cervix was made. Biopsy from the growth showed spindle to stellate-shaped cells lying in loose myxomatous stroma enclosing thin walled blood vessels. Clusters of cells with round to oval hyperchromatic nuclei attempting to form organoid structures were seen. The lining of these spaces was not clearly made out. Based on this, a diagnosis of mixed mesodermal tumour was made (Fig. 1).

A total abdominal hysterectomy with bilateral salpingo-oophorectomy was performed. No secondaries were observed.

The specimen of an enlarged uterus showed a sessile polypoidal mass arising from the endocervix and projecting out of the cervix. Cut surface of the tumour mass was gelatinous with

few cystic spaces. The wall of the uterus was thickened and enclosed rounded masses in the myometrium giving a whorled appearance. (Fig. 2).

On microscopy a picture similar to earlier biopsy was observed. (Fig. 3) Bulk of the tumour comprised of loose myxomatous tissue enclosing stellate-shaped cells at places differentiating into young cartilagenous tissue. Many dilated lymphatics contained tumour emboli. Few of the lymphatics were cystically dilated and showed pink fluid in their lumen. The nodules in the myometrium showed characteristic features of a leiomyoma. Based on these findings, the tumour was labelled as a heterogenous mixed mesodermal tumour. One month after the operation, on follow up granulation tissue was seen at vault. Biopsy of this showed? residual tumour. Patient was referred for radiotherapy as further treatment.

Discussion

The paucity of knowledge pertaining to mixed mesodermal tumours of the genital tract is not only due to the rarity of this lesion but also to the multiple variations of terminology and therapy described. Many names have been applied to them depending on site of origin, naked eye appearance, histological features and suggested histogenesis. McFarland (1935) found 119 different names for this clinical condition. Emphasis has been on mixed type of tissue, epithelial and stromal. These tumours contain tissues heterotopic to the location in which they are found (cartilage, striated muscle, osteroid, bone and fat).

Symmonds and Dockerty (1955) believed that many sarcomas and carcinosarcomas on closer inspection will be showing fibromyxomatous portions, epithelial elements and heterotopic tissues as well. Basically the neoplasm is derived from the mullerian apparatus (Sternberg *et al*, 1954). The carcinomatous elements seen in mixed mesodermal tumours are limited histologically to those seen in endometrium, cervix, fallopian tube and vagina. The sarcomatous components have a broader capacity for sarcomatous differentiation and is less specific (Sternberg *et al*, 1954).

Mortel *et al* (1971) considered that sarcomatous component must be well differentiated as striated muscle, cartilege or bone. Cases of rhabdomyosarcoma, chondrosarcoma and osteosarcoma have been included under the descriptive term of "Botryoid sarcoma" under which name some authors include mixed mesodermal tumour as well (Madhavan *et al*, 1974). Similarly cases of carcinosarcoma of the uterus are also included under this heading. (Reddy *et al*, 1970). Wherever carconoma has been accompanied by sarcomatous elements which are not well differentiated, the possibility remains that it could represent an anaplastic carcinoma (Mortel *et al*, 1971).

Sporadic cases of mixed mesodermal tumours have been reported in Indian literature by Roy and Choudhary (1964), Shah and Parikh (1971), Sharma and Misra (1972), Madhavan *et al* (1974) and Rao and Devi (1977).

Surgery seems to be the treatment of choice. Extent of surgery depends on extent of growth. This may be followed by radiotherapy or chemotherapy. Radio therapy alone does not give good results. (Norris *et al*, 1966). Prognosis depends on type of growth and extension of growth to surrounding structure. Williamson and Christoperson (1972) reported a 5 year survival rate of 20.5 per cent for mixed mesodermal tumours of uterus. No Indian author has reported a 5 year survival for any case.

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See Figs on Art Paper VII