MIXED MESODERMAL TUMOUR OF THE CERVIX AND UTERUS

(Report of Two Cases)

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Mixed mesodermal tumours of the female genital tract are rare. In view of the infrequency of its occurrence, and the clinical interest and the unusual location of the tumour, we wish to report two cases studied by us.

Case Reports

Case 1

Mrs. V., aged 50 years attended the gynaecology outpatient department of JIPMER Hospital with the complaints of a mass coming down per vaginam and irregular bleeding for the last four months. She had four full-term normal deliveries with two live children. Her last child birth was 15 years ago. The patient had attained menopause two years ago.

Vaginal examination revealed an irregular polypoidal growth protruding through the vaginal introitus. The surface was nodular, and haemorrhagic and was covered in areas by a thick slough. The mass was seen to arise from the posterior lip of the cervix and the external os and the anterior lip could be identified as normal. The mass was soft, fleshy, friable, tending to bleed on touch. Uterus was felt in mid-position, almost normal in size but was fixed. Both parametria appeared to be infiltrated. Bladder base was felt free from the growth. A combined P.V. & P.R. examinations revealed that the parametria were infiltrated upto the pelvic side wall, much more so on the left side. Uterosacrals were also felt to be infiltrated by the growth. Rectal mucosa was free.

A provisional clinical diagnosis of prolapse uterus with cancer cervix stage III was made and a biopsy was done.

Histopathological examination revealed only necrotic granulation tissue but a second biopsy after three weeks showed sarcomatous stroma with islands of cartilage. A diagnosis of mixed mesodermal tumour was suggested and panhysterectomy with removal of parametria, paracolps and a cuff of vagina was done and the specimen was subjected to detailed histopathology.

The specimen consisted of uterus, parametria with both tubes, ovaries, a segment of vagina weighing 250 gms. There was a polypoidal growth arising from the posterior lip of cervix, more on the left side, measuring 11 x 8 x 6 cms (Fig. 1). Cut section showed alternating greyish white and haemorrhagic areas. Uterus measured 5 x 4 x 3 cms the uterine wall measuring 1.5 cms in thickness, the endometrial cavity being normal. Ovaries and tubes showed no abnormality.

Microscopic examination of multiple sections from the tumour revealed an admixture of spindle and round cells with hyper-

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chromatic nuclei, and scanty cytoplasm. These cells were arranged in clusters against an oedematous loose background. Occasional attempt at whorling was seen. There were abundant mitotic figures with many tumour giant cells. Extensive areas of haemorrhage, necrosis and myxomatous change and islands of cartilage were also present Microscopy also confirmed the origin of the tumour from the urine. The body of the uterus, ovaries and tubes were found to be normal.

Case 2

A 56 year old Muslim woman sought admission for white vaginal discharge with occasional blood staining for the last two months. She had attained menopause 10 years ago. She had two full term normal deliveries, the last child birth 35 years ago.

On examination there was a lump in the lower abdomen, more towards the left, moving from side to side, with a smooth surface.

Vaginal examination revealed the uterine body to be enlarged to 16-18 week, size, with restricted mobility. The cervix was healthy. There was induratios along the posterior fornix and uterosarcral ligaments. There was a mass felt in the left fornix.

A provisional diagnosis of uterine carcinoma was made and endometrial curettings was sent for histopathology. This showed embryonal stroma with sarcomatous zones and multiple foci of cartilagenous metaplasia. No other mesenchymal component was detected and no ectodermal element was present. A diagnosis of mixed mesodermal tumour was made.

Ten days after admission, the patient passed a large fleshy mass filling up a 200 cc kidney tray which could not be subjected to histopathological examination. Laparotomy at a later date showed an enlarged uterus with plastering of the small intestines, ovaries and tubes to the uterine mass. Omentum and the serosa of the large and the small intestines and the rectovesical pouch had metastatic deposits on them and the para-aortic lymph nodes were enlarged. Due to the extensive adhesions, surgery was not undertaken and the abdomen was closed. Patient was advised radiotherapy.

Discussion

Mixed mesodermal tumour may occur in the body of the uterus, cervix or vagina, the cervix being the most unusual site. Heterotopic tissues like cartilage or bone with a background of embryonic sarcomatous tissue is essential for the diagnosis, with a paucity of ectodermal derivatives. But, 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. One has to separate these "pure" sarcomas having one type of morphology from the mixed mesodermal tumours. The other tendency is to include tumours showing both mesodermal and ectodermal derivatives, explaining their origin to embryonal stem tissue. This has resulted in an otherwise carcinosarcoma of the uterus included under mixed mesodermal tumours (Novak, 1967; Reddy *et al*, 1970).

There has been controversies regarding the histogenesis of the tumour. Misplaced Wolffian duct remnants, connections between Wolffian and Mullerian systems and Mullerian mesoderm have been suggested as the tissue of origin (Haines, 1962). Irradiation to the uterus has been suggested as a causative factor by some workers (Schiffer *et al*, 1955). Sternberg *et al* (1954) reported 21 cases of mixed mesodermal tumour among 26,114 patients over a period of six years, giving an incidence of 0.08 per cent. Taylor (1958) found 20 such cases within ten years. Roy and Choudhary (1964) reported two cases out of 5,881 admissions at the Chittaranjan Cancer Hospital, Calcutta, during a period of 12 years. An autopsy study on a uterine mixed mesodermal tumour has been reported by Kshirsagar *et al* (1970). Willis (1967) is

of opinion that cervical tumours are similar to vaginal and urinary bladder growths, whereas uterine growths are very often carcinosarcoma. The main points of interest in our cases is the post-menopausal age of both of our patients and the site of origin in one case being the posterior lip of the cervix.

Summary

Two cases of mixed mesodermal tumours, one arising from the posterior lip of the cervix and another from the body of the uterus in postmenopausal women are reported.

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See Fig. on Art Paper I