SARCOMA BOTRYOIDES

(A Case Report)

by

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Among the rarest group of tumours of the cervix which has been the subject of illuminating discussion in the past few years, none is more interesting, than uncommon grape-like sarcoma of the cervix, i.e. Sarcoma Botryoides of cervix. These rare tumours have excited a sustained interest because of their unusual appearance, occurrence principally in female infants, high mortality and in effective treatment. This descriptive term was used by Guer-Sant in (1854). It describes a malignant mesodermal tumour which looks like a bunch of grapes arising from the lower part of female genital tract. This malignancy occurs both in adults and children. Early reference to the disease are mostly found in Austrian and German literature. Adderson and Edmannson (1869), Monkburg (1874), Conheim (1875), Pfannenstiel (1892), Willms (1899), have described microscopic appearances of the tumour in some detail. This grape-like tumour "Traubuges sarcoma" was also described by Speigelberg in 1897 under the designation "Sarcoma Collerium hydropicum papilarae" giving the detailed macroscopic picture. Joseph MacFarland, in two monumental papers (one of these containing 516 references) made comments that some authors have considered the soft botryoid tumours a variety in themselves, but this grape-like appearance resulted only from the amount of moisture which the tumour happens to contain.

Review of literature shows that it is such an extremely rare tumour, that it is difficult to give any statistical data about the standerd line of treatment, its morbidity, mortality, its route and common sites of metastases. Every case report records a different clinical picture. This can be understood if we analyse that though the gross appearance consists of polypoid, grape-like mass arising from the cervix which gives it graphically the name sarcoma botryoides, histologically the picture varies and presents an embryonic mixed-mesodermal tumour, explaining its protean manifestations and mestastases.

The purpose of this paper is to place on record, the history, clinical findings, and histology of a case of sarcoma botryoides occurring in older

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age group. The interest of this case lies in the fact that it demonstrates the multicentric origin, having two seperate growths one in uterus and the other in cervix. There is a distinct space of healthy uterine tissue between these two growths. The botryoides nature of the growth is present even in the small uterine tumour.

Case Report

S., 60, housewife, Hospital No. G/1466, was admitted on 30-6-62 with complaints of a mass protruding per vaginam for two months, which she had noticed after a fall. She also complained of watery discharge for the same period.

She had menopause 16 years back. She had 5 full-time normal deliveries, her last child being 25 years back.

On Examination

She was of average health, slightly pale; her pulse 108/min. and blood pressure 118/78 mm. of Hg. Nothing abnormal was detected in the examination of cardio-vascular and respiratory systems. Her liver and spleen were not palpable.

On vaginal examination a growth was seen protruding per vaginam, which looked fleshy, oedematous, pale, and a grape-like mass was seen filling up the whole of vagina and arising from the posterior lip of the cervix.

Preoperative investigation of her blood, urine, intravenous pyelogram, X-ray chest presented normal picture. Biopsy of the growth was taken which gave a histological picture of sarcoma. During operation, examination for any lymphatic or blood-borne metastases was made. Liver was palpated and found normal. No lymphatic glandular enlargement was seen or palpated. Panhysterectomy with a cuff of vagina was done. Patient made an uneventful recovery.

Patient was seen after one year. She had no evidence of recurrence of growth.

Patient was again examined in February 1963. She has no evidence of recurrence of metastasis.

Pathology

In the gross appearance the growth arose from the posterior part of the cervix which expanded, and filled in, the whole of the vagina. There was also a small growth arising from the posterior wall of the uterus. In its naked eye appearance the tumour consisted of grape-like oedematous, moist, polypoid fleshy mass hanging down from the cervix. The uterine mass also was similar but smaller. These two growths were distinctly separate, with 1½″ space of healthy uterine tissue between the two, showing that it was not a continuous process. This was histologically confirmed (Fig. I).

Fig. 1

Histologically it consisted of oedematous, myxomatous, cellular stroma containing pleomorphic cells some of which were large and some contained several nuclei. Pathologically it resembled a sarcoma (Fig. II).

Discussion

Wilfred Shaw (1928) has classified the malignant mesodermal tumours of female genital tract according to their site of origin-the body of the uterus, cervix, and the vagina, of which cervix is the most uncommon.

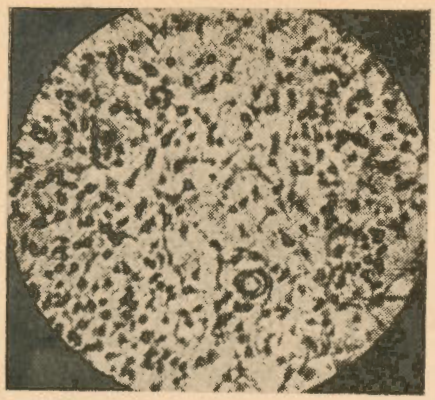

Fig. 2

Crawfords et al (1957) described 34 cases of uterine sarcoma of which only 3 were tumours of the cervix. Taylor (1958) has described five cases of botryoides type of growth out of 40 uterine mixed mesodermal sarcomata. Novak and Anderson (1937) reported 59 cases of uterine sarcoma, of these 4 were cervical. Very few cases have been reported of cases of combined uterine and cervical sarcoma.

Growth and Spread — According to Glynn and Blair Bell (1914) the growth may distend the vagina and/or infiltrate the recto-vaginal and vesico-vaginal septum. It may penetrate and perforate the uterine wall and cause fatal peritonitis. Spread may occur into the parametrium and pelvis.

According to Dwyer (1944) direct ureteric involvement, which is a well-recognised sequela of cancer cervix is a rare occurrence in sarcoma botryoides. Infiltration of the ureter is a rare occurrence but ureteric dilatation may follow obstruction of bladder outlet by the growth from the vagina. Owen (1933) described a fatal case of peritonitis with right hydronephrosis due to obstruction of the ureter by the vaginal growth. In this case growth was found only to have distended the vagina. It had not sufficiently filled the vagina to cause obstruction to bladder outlet. The recto-vaginal and vesico-vaginal septa were free in spite of the growth in the body of the uterus. Excretory pyelography showed no obstruction to ureters. Dissemination of the growth to the regional pelvic and para-aortic lymph nodes have been reported by Demme (1981) and Bidone (1904). But this is considered by other authours as a relatively rare phenomenon, Metastasis, like any sarcoma, takes place by the blood stream. In this case there was no gross enlargement of pelvic lymph nodes; one can be fairly certain that lymphatic involvement had not taken place because firstly, this being of the nature of sarcomatous tumour is not expected to have lymphatic dissemination. Secondly, as noted by other authorities lymphatic dissemination is a relatively rare phenomenon in sarcoma botryoides.

Pleural and pulmonary metastases are recorded by Dugge in 1930, Negle 1933, Willis 1948. There was no evidence of plumonary metastasis in this case as seen clinically and by X'ray of chest. Therefore, this case seems to be a case of relatively less malignant type of sarcoma.

Treatment

With the exception of the papers by Ulfelder and Quana in 1947, the literature is devoid of a clear discussion on the treatment of sarcoma

botryoides. Meiges (1947) advocated Wertheim's type of hysterectomy, as, according to him, local operations are commenly followed by local recurrance of the growth. In this case modified type of Wertheim's was done (Te-Linde type). No local recurrance has been noticed in the follow-up, but it is too early to comment. It is expected that as the case has given no evidence of metastases anywhere in the body, either blood born or lymphatic, she will come under the category of cases which are relatively less malignant and curable by pan-hysterectomy.

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