MULTIFOCAL CARCINOMA OF THE FEMALE GENITALIA†

by

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The possibilities of a patient having simultaneously more than one malignant neoplasm of the genitalia, synchronus, concomitent or sequential is traced as back as Billroth (1889) but only scattered reports are available on record.

The varying terminology, multicentric, multifocal, synchronus and sequential has been used stressing upon the different etiological postulation of this multiple pathology which has often been very much divergent. The definition mostly acceptable is as follows "Multifocal Genital carcinoma embodies the concept of a field of neoplastic potential consisting of the organ system (ectocervix and Vagina) and the sexual skin (vulvar and perineal) which when exposed to a common carcinogenic stimulus is capable of developing changes that may eventually culminate in the development of an invasive or pre-invasive carcinoma in one or more sites simultaneously or over a period of time (Ostergard and Morton, 1967). Marcus (1963) remarked that the multifocal carcinoma was "the multiple response of a susceptible or prepared field of epithelium to a carcinogenic stimulus acting over a sufficient period of time."

The genesis of multifocal origin of cancer in the upper genital tract is more controversial and there is no unanimity of opinion as to its simultaneous occurrance or transmission through the fallopian tubes from uterus to ovary or vice versa, with resultant implantation and growth at a second site. Novak (1927) and Meig (1922) in their study of multicentric cancer of upper genital tract stressed more on the fact of vascular or lymphatic spread to the second primary site though Sampson's (1934) retrograde menstrual implantation theory holds good for possible transmission through unaffected tubes.

We are presenting four cases of multifocal genital cancer detected simultaneously, or the second invasive primary site appeared within 6 months to 2 years after treatment of the first primary lesion.

Case 1

Sm. P. D., aged 65 years, Para 10 + 0, was admitted in 1971 with a swelling of the left side of vulva for 5 months. She had noticed a small swelling initially which had grown slowly to the present size.

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Accepted for Publication on 4.5.1976.

Past history of post menopausal bleeding—diagnosed and treated for carcinoma cervix stage II by radiation through Eden Hospital, Calcutta 1 year back. Patient was asymptomatic and had an irregular follow up. No other illness reported.

Menstrual History—Menopause—20 years.

General condition—moderate thin built.

P/R 80/20 p.m.—B.P.—130/90 mm of Hg. no anaemia—Hb-12 gr.

Systemic Examination: Nothing abnormal detected.

Local Examination: A swelling on the left labia majora, approximately at the junction of upper two-third and lower third, extending to the posterior vaginal wall, Size 2″ x 2″, margins diffused, surface smooth, feel hard, base indurated fixed, no tenderness. Inguinal lymph nodes on both sides were enlarged, hard discrete and mobile (Fig. 1).

On Vaginal Examination—Cystocele + Rectocele + Uterus. R.V. small, Cervix—indurated, Fornices—clear. Parametrium—free.

Routine Laboratory investigation—done for blood, urine and stool. Nothing abnormal detected. X-ray chest—clear.

Excision biopsy of the swelling was done and histopathology report was adenocarcinoma of the Bartholin's gland.

Radical vulvectomy was performed. The postoperative recovery was uneventful. Follow up upto 1 year was irregular. Patient got cachectic, emaciated and died after 1 year 4 months.

Case 2

Sm. S. D., 35 years. Para 6 + 1 was admitted in 1972 in Eden Hospital with a fungating growth on the vulva for 6 months. The growth initially was small and gradually extended up involving the clitoris. It did bleed on touch occasionally.

Past History of post menopausal bleeding and excessive white discharge, diagnosed and treated as carcinoma cervix stage I by radiation at Calcutta Medical College—1 year back. Patient failed to turn up for follow up regularly. No other illness reported.

Menstrual History: Menopause at 48 years i.e. 7 years back.

Examination on Admission

General condition moderate, thin built, P/R—80/20 p.m. reg. B.P. 128/70 mm of Hg. Anaemia +, Hb—9.8 gm%.

Systemic Examination: Nothing abnormal detected.

Local Examination: The vulva was atrophic. There was a fungating growth on the right labia majora involving the upper two third and the clitoris. The tissue was friable and did bleed on examination. (Fig. 2).

On Vaginal Examination: Uterus Normal in size. Fornices—clear. Cervix bulky firm. Parametrium—free.

On Speculum Examination: Cervix was bulky indurated. Routine Laboratory investigation of blood, urine, stool—was normal. X-ray chest—clear.

Excision biopsy from the local growth on histopathological examination was squamous cell carcinoma.

Radical vulvectomy was performed. The postoperative period was uneventful though healing was delayed. Patient came for follow up for 2 years and was doing well and failed to turn up since.

Case 3

Sm. R. S., 42 years, para 3 + 0, was admitted in 1974 with the history of swelling in the lower abdomen for 1 year and its rapid enlargement for last 6 months. She complained of occasional dyspnoea and gradual weakness.

Past History, nothing significant.

Menstrual History: Menarche 14 years. Cycle regular 28/30/ 3-4 days, flow—average last menstrual period, 15 days back-normal.

Systemic Examination: Heart—nothing abnormal detected.

Lungs—evidence of hydrothorax, right base. Per abdomen. There was evidence of free ascitic fluid, fluid thrill and shifting, dullness present. Lower abdominal irregular firm mass occupying both illiac fossae—size—3″ in diameter with irregular outline.

On Vaginal Examination: Uterus—normal in size pushed in front, mobile. There was fullness of both lateral fornices and mass felt through both fornices, firm irregular and restricted mobility.

Special Investigations: blood, urine and stool, nil abnormal. X-ray Chest showed evidence of pleural effusion at the right base. Abdominal paracentesis was done—the drained fluid was haemorrhagic.

On cytological examination malignant cells were found.

The pleural effusion was drained to relieve dyspnoea.

Laparotomy followed by abdominal total hysterectomy with bilateral salpingo-oophorectomy was done.

Macroscopic examination: The uterus was bulky and cavity showed evidence of body carcinoma? Both the ovaries were polycystic with fungating growth.

Histopathological report was endometrial adenocarcinoma with papilleferous pseudomucinous cystadenocarcinoma of both ovaries.

The postoperative recovery was uneventful. The patient was put on a complete course of Endoxan therapy with gradual withdrawal. She is still on maintenance dosage and is being followed up without any further recurrence.

Case 4

Sm. R. G., 30 years, Para 2 + 3 was admitted on 19-9-74 with history of acute pain in the abdomen and nausea She was diagnosed to be a case of twisted ovarian cyst and an urgent laparotomy followed by right sided ovariotomy was done for twisted ovarian cyst with intracystic haemorrhage. The ovarian cyst was 14 cm in diameter, multilocular. dark red in colour, cut surface contained haemorrhagic mucoid gelatinous material. H.P. report—pseudomucinous cystadenoma. The postoperative period was uneventful.

Patient gave past history of excessive white discharge per vaginam, excessive loss of blood during menstruation, the cycles were irregular and patient gave history of contact bleeding for last one year.

On examination: General condition moderate, P/R 80/20, B.P. 112/80 mm of Hg. Anaemia—Nil, Hb—11.8 gm%.

Systemic Examination: Nothing abnormal detected.

Per Abdomen: Scar union healthy.

On Vaginal Examination—uterus normal in size, A.V. mobile.

Right fornix thickened, left ovary palpable.

On Speculum Examination: Cervix bulky, and very unhealthy. Cervical biopsy was sent for histopathology examination and showed papillary adenocarcinoma of the cervix.

On 20-10-74—Abdominal extended total hysterectomy with left sided salpingo-oophorectomy was done. Attempts were made for removal of glands en mass. Left sided lymph glands were removed. The right sided lymphadenectomy was difficult due to extensive adhesions.

The postoperative recovery was uneventful. Histopathology report showed—papillary adenocarcinoma of the cervix, adenocarcinoma of the left ovary with evidence of metastatic deposits in the left obturator glands.

Patient received Endoxan therapy and is still being followed up and is under control.

Discussion

Multifocal cancer arising in the same type of tissue, occur much more frequently than coincidence alone can explain. Demonstrable multifocal anaplasia in the upper genital tract, evidently represents multicentric foci of origin rather than metastases.

In cases I and II, the recurrence at the vulva occurred within 6 months of treatment of the first primary site at cervix by radiation. It is difficult to state whether the second primary had existed and was revealed later or whether radiation enhanced the exuberance of the second primary. Though development of second primary lesions are on record after radiation treatment evidences are lacking to establish whether radiation initiates subsequent neoplasia. In cases III and IV ovarian malignancy was diagnosed, coexisting with the endometrial carcinoma, and carcinoma cervix respectively. Coexistence with divergence of histopathology in case III is more suggestive of multifocal origin of cancer. In case IV the theory of retrograde migration of malignant cells and deposits in the second primary at the left ovary is questionable. The fallopion tube were spared as evidenced by histopathological examination establishing the concurrence of two primary sites of cancer.

To conclude the criteria tabulated by Warren and Gates (1932) for distinguishing second primary from metastases is applicable in distinguishing the two

simulating but controversial pathogenesis.

(i) Each tumour should be picture of definite malignancy i.e. invasive nature

(ii) Each tumour must be discrete histologically, ruling out colliding tumours and mixed type tumours as carcinosarcoma

(iii) The possibility or probability of one tumour being metastatic from the other must be excluded.

Acknowledgement

We are thankful to Dr. B. Chakraborty, Principal Superintendent, Medical College Hospital. Calcutta and Dr. S. K. Deb, Surgeon Superintendent, S.S.K.M. Hospital for allowing us to use hospital records.

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See Figs. on Art Paper XVI