## CARCINO SARCOMA OF THE CERVIX

(A Case Report)

by

SAROJ SRIVASTAVA,\* M.S.,
NIRMAL MOKADAM,\*\* M.D.,
SARALA SURANA,\*\*\* D.G.O., M.D.,
MRUNALINI KHER,† M.D.

MUKTA KHERDIKAR,†† M.D.

## Introduction

Carcinosarcoma of the cervix is a clinicopathological curiosity and rarity in gynaecological practice. Good many cases fundal and uterine tumours are on record. Those arising from the cervix are rare. It is difficult to assign the original site as the cervix, because the patient might be reporting when the uterus and cervix are involved as the result of rapid progression of growth.

The credit for the initial description of these neoplasms goes to Virchow (1864) who coined the term as "carcinosarcoma". The first case report was made by Weber in 1867. In 1920, Meyer classified these tumours into three groups (1) collision tumour (2) combination tumour, (3) composition tumour.

In 1945, Morehead and Bowman reported that these tumours are quite common and not rare as it was thought before.

In 1946-52 Sternberg et al reported a collection of 21 cases and another group 51 cases in 1961 with an incidence of 0.1% of carcinosarcoma, 1.1% of carcinoma corpus and 11.5% as carcinoma of the cervix. Mendal et al (1967) reported 15 cases of mixed mesodermal tumours of the uterus. Masterson et al (1969) reported 25 cases of mixed mesodermal tumours, in 18 the growth was confined to the corpus whereas the cervix was involved in the ramaining cases with an incidence of 2.5% of malignant uterine tumours.

Chien Tien HSU (1970) has reported a number of cases and tried to establish a histopathological classification by using different staining technique. Glucksmann (1970) reported 105 cases of mixed mesodermal tumours with its incidence as 5-8% of cervicouterine malignant neoplasms.

## Case Report

Mrs. L.M., 50 years old Hindu female was admitted to the department of Gynaecology and Obstetrics in Govt. Medical College Hospital, Nagpur, on 12-7-1972 with the following complaints. (1) Increasing vaginal discharge (colour being white to red) 7 months duration. (2) Progressive

<sup>\*</sup>Pool Officer.

<sup>\*\*</sup>Reader.

<sup>\*\*\*</sup>Lecturer.

<sup>†</sup>Reader in Pathology.

<sup>††</sup>Reader in Pathology, Dept. Med. College Hospital, Nagpur.

Received for publication on 9-4-1973.

general weakness 6 months duration. (3) Low backache for 6 months.

Menstrual History: Patient had attained uneventful menopause 9 years ago and had no complaints till 7 months ago. Her previous cycles had been regular with normal flow.

Obstetric History: She had 5 term normal deliveries, the last delivery was 11 years ago. No history of abortions.

General Examination: She was moderately built and pale. Pulse 80/mt. regular, temp. normal, B.P. 90/60 mm of HG. Respiratory, cardiovascular and abdominal examinations did not reveal anything abnormal.

Bimanual Vaginal Examination: On pelvic examination there was moderate atrophy of vulva. A red, papillary, tongue-like, friable growth  $2\frac{1}{2}$ " x 2" in size arising and replacing the anterior lip of the cervix was seen. Vaginal vault was free. External os was indentified behind the growth. Uterus was normal in size. Adenexae were not palpable.

Rectovaginal Examination: No evidence of infiltration into uterorsacral ligament or parametrium. Rectum was free. A piece of the growth got detached during examination.

#### Investigations

Hb. 7.8 gms%, total white cell count 7800, blood sugar 100 mgs%, blood urea 33.3 mg%, K.T., VDRL were negative. Urine analysis was within normal limits. Urine culture grew E coli sensitive to streptomycine, etc.

X-ray chest did not show any evidence of secondaries in the lungs. Intravenous pyelogram was within normal limits.

Examination Under Anaesthesis: Fractional curettage was done on 17-7-1972. Uterocervical length was  $2\frac{1}{2}$ ". No material was obtained on curettage. Cervical biopsy was taken from the growth at 10'O clock position.

Histopathology of the first biopsy was read as adenoepidermoid carcinoma while second biopsy report was suggestive of fibrosarcoma. In view of the above controversial diagnosis it was presumed to be a case of mixed mullerian malignancy so patient was scheduled for radical operation.

After treating her anaemia patient underwent Wertheim's hysterectomy on 5-8-1973. Postoperative course was uneventful. Three weeks after the operation patient received a course of deep X-ray therapy, 3000 rs and was discharged in good condition.

Pathology Report: Gross examination—the tumours was about  $2\frac{1}{2}$  ×  $2\frac{1}{2}$  in size arising from the cervical canal and was restricted to it. It was soft and polypoid, pink red in colour. On cutting, it was soft to firm in consistency and red to yellow in colour. No ulceration. Uterus and adenexae were normal (Fig. 1).

Microscopically the tumour showed three distinct patterns freely intermingled. One is that of an adenocarcinoma arising from the cervical glands. The second one is that of a spindle cell sarcoma (Fig. 2.3) cervical squamous epithelium was normal. Microscopically, no extension in the uterus was noticed even after studying multiple sections. On this basis it was diagnosed as mixed mullerian tumour of cervix.

#### Comments

Carcinosarcoma is an interesting condition of rare occurrence but high malignant potency. Regarding the terminology of this condition there seems to be a lot of confusion whether carcinosarcoma and mixed mesodermal tumour should be considered as seperate entities

This tumour arises in the 5th and 7th decade of life with no relation to parity. A positive history of irradiation to stimulate the occurrence of the growth has been reported by Sternberg in whose series two cases were irradiated 11-13 years prior to the detection of the growth. In Mastersums series 5 cases (20%) had irradiation for menorrhagia. Symptomatology consists of vaginal bleeding, abdominal pain, low backache and vaginal discharge noticeable for 2-4 months. The growth appears as a friable polyp protruding from the cervix with enlargement of the uterus. The metastasis may

be as a result of hematogenous, lymphatic or direct extension to local or distant foct as a result of combination of carcinoma and sarcoma. The tumour developes as a result of—

- (1) Occurrence of carcinoma and sarcoma with close proximity as a result of coincidence, hence termed collision tumour.
- (2) Combination tumour as a result of carcinomatous and sarcomatous elements arising from pleuripotential tissus (PFannenstiels theory) supported by Sternburg and
- (3) Composition tumours in which both the components arise simultanously within the same tissue.

The histogenesis of these tumours is unknown but most widely accepted view is that it arises from the mullerian stroma that exists beneath the surface epithelium of endometrium, cervix and vagina having multipotential activity.

It is a rapidly growing fatal tumour the 5 years survival rate being very small. The maximum survival duration seen in Sternburgs series was 2 years whereas the Synmounds series only one out of 55 is reported to have lived for more than two years.

A meticulous examination of adequate biopsy and surgical specimen can reveal the exact nature of the tumour. Either element can be missed in a single section. It is only the study of serial sections that will reveal the epithelial as well as sarcomatous elements present in this tissue. The epithelial component will consist of epithelium of the fallopian tubes, endometrium or cervix whereas immature or mature, or rhabdomyosarcoma, leiomyo-

sarcoma, fibrosarcoma, chondrosarcoma, lymphosarcoma or round cell sarcoma.

No standard treatment has been found to be satisfactory. Surgery, irradation and chemotherapy have been tried separately and with different combinations. Surgery should consist of radical hysterectomy with pelvic lymphadenectomy and partial vaginectomy.

## Summary

A case of carcinosarcoma of cervix is reported with a bried review of the literatue. The establishment of the diagnosis is made by clinical examination and adequate sections from the biopsy as well as specimen. If these cases are operable radical surgery offers best results.

# Acknowledgements

We are very much thankful to the Dean Dr. V. B. Pathak, Dr. V. D. Shastrakar, M.D., Prof. of Obst and Gynec. Medical College Hospital, Nagpur.

## References

- Glucksmann: As quoted by Reference No. 2
- HSU Ch.en Tien: J. Asian Fed. Obst. & Gynec. 1: 55: 1970.
- Masterson, J. G. and Kremper: Am. J. Obst. & Gynec., 101: 693, 1969.
- Mendel, E. B., Fredlucas, W. M. and Panopio, I: Obst. & Gynec. 30: 66, 1967.
- Merehead, R. P. and Bowman, M. C.: Am. J. Path. 21: 53, 1945.
- Sternbarg, W. H., Krupp, P. J. and Clark, W. H. et al: Am. J. Obst. & Gynec. 81: 959, 1961.
- Virchow, R.: As quoted by Brinton, J. A., Ito Yuichi, Olsen, B. S.: Cancer: 25: 1183, 1970.