PRIMARY PAPILLARY CARCINOMA OF THE FALLOPIAN TUBE

by

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Primary carcinoma of the tube is the rarest tumour of the reproductive system. However it is an important malignancy of the genital tract because of late diagnosis and a poor salvage rate.

The incidence varies from 0.1% (reported by Miller 1948) to 1.6% (reported by Hayden and Potter 1960) with an average of 0.3% of all genital tract malignancies. Boschann (1961) observed that approximately 1 out of every 1000 gynaecological operations turn out to be fallopian tube malignancy. Approximately 800 cases have been reported in World literature (Novak and Woodruff 1974).

CASE REPORT

Mrs. E., 52 years old menopausal patient, para 10 was admitted to this hospital on 8th of March 1977 with the chief complaint of vaginal discharge for the preceding 4 months. To start with the discharge was intermittent, watery, clear, non-irritant, not foul smelling and not accompanied by pain. There was no significant diurnal variation. Two and a half months back the patient noticed a pinkish yellow discolouration of the discharge and for the last 2 months it had become profuse, serous and occasionally tinged with fresh blood. There was no history of abdominal pain, postcoital bleeding, bowel or urinary disturbance, trauma or loss of weight and/or appetite. Patient had taken no hormonal treatment prior to admission.

The patient gave history of occasional, intermittent, vaginal discharge for last 20 years which had been ranging from white to purulent. No cytologic screening was done and patient had no operations.

Family history was not contributory.

Menstrual history—Menarche at 15 years. Cycles 3-4/30 days, regular. She had an uneventful menopause 4 years back at the age of 48.

Patient was married at the age of 17 years and had 10 normal term deliveries, with the last child birth 13 years ago at the age of 39 years. No contraceptives were ever used.

On general and systemic examinations nothing abnormal was detected. Liver and spleen were not palpable and there was no mass or free fluid in the abdomen.

Speculum examination showed a healthy vulva and vagina.

On bimanual examination the cervix was pointing downwards and forward, the uterus was retroverted and normal in size. A small cystic mass approximately 4 cm × 4 cm in size was felt in the left and posterior fornices, smooth in outline, nontender and fixed. The right adenexa was not palpable. No nodules were felt in the pouch of Douglas. There was blood on the examining finger.

On rectal examination, the rectal mucosa was free. There was no parametrial thickening and same mass was felt through left and posterior fornices.

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Investigations

Haematological and biochemical tests, radiological and urine examinations were unremarkable. Erythrocyte sedimentation rate by Wintrobe was 70 mm/m. Smears taken from the posterior pool and ectocervix showed squamous epithelial cells predominently of intermediate type with a few superficial and parabasal cells. No evidence of inflammation, malignancy or dysplasia was seen.

At fractional curettage scanty curettings were obtained from the endocervix. No tissue was obtained from the isthmus and body of the uterus. Cervical biopsy showed chronic cervicitis.

As the patient continued to have a blood stained vaginal discharge and in view of suspected malignancy of ovary or fallopian tube, a laparotomy done on 14-4-1977. There was a small amount of blood in the peritioneal cavity, the uterus was normal in size and shape. In the pouch of Douglas there was a smass about 4 cm × 4 cm in size partly cystic and partly solid arising from lateral end of the left fallopian tube which had a partial twist proximal to the mass. Few flimsy adhesions of the growth posteriorly with pelvic peritoneum were present. The left ovary was atrophic and separate from the growth and the right tube was closed at the fimbrial end and had a haematosalpinx. The right ovary also was atrophic. No secondaries were seen or felt. Adhesions of the tubal mass were separated from the pelvic peritoneum and a total hysterectomy with bilateral salpingo-opphorectomy was done. The postoperative period was uneventful and the patient was referred for radiotherapy.

Pathology: On cut section uterus was normal in size, with a normal cavity and myometrium. Endocervical canal was dilated. The left tube was 9.5 cm in length with a tumor measuring 4 cm. in diameter at the lateral end. The right tube was 5.5 cm in length. Both ovaries were atrophic.

Histopathological examination showed proliferative endometrium with arteriosclerotic changes in the myometrium and chronic cervicitis with papillary carcinoma of the left fallopian tube, bilateral chronic salpingitis and perisalpingitis with focal organising haemorrhages in the left tube and focal chronic non-specific oophoritis.

Discussion

Of all the primary malignancies of the fallopian tube, 95% are adenocarcinomas.

The age incidence varies from 18-80 years but most cases occur in the fifth decade of life. Sedlis (1961) by reviewing 230 cases calculated the mean age as 52 years, which is 5 years younger than endometrial carcinoma.

Infertility or one child sterility is found in 40 to 50%. Tubal involvement is commonly unilateral involving either tube with equal frequency. When bilateral it is thought to be due to a multicentric origin rather than metastatic.

Commonly the lateral or middle third of the tube is involved. On gross examination the tube is enlarged, may be sausage shaped with few or no adhesions. The tubal wall is usually thinned out over the growth but intact. Vegetations may appear on the outer surface. The fimbrial end is occluded in about 50% of cases. The growth spreads through the abdominal ostium to the peritoneum, omentum and ovary. Lymphatic spread occurs to the ovary and uterus and later to the iliac and para-aortic glands.

The symptoms usually are metrorrhagia manifesting as intermenstrual bleeding or postmenopausal bleeding, spotting or bloody discharge and occur in 35-50% cases. Pain occurs in 25-60% cases and is sually cramp like or colicky due to tubal peristalsis to expel the growth or a dull ache due to distension. Leucorrhoea occurs in 30% cases and is usually a copious, watery discharge in spurts.

Inspite of tubal growth the adenexal mass is palpable in about 29% cases only and 14% cases have nodules in the pouch of Douglas. (Pauerstein and Woodruff, 1969).

Frank bleeding is a late sign. The patient may be asymptomatic in approxi-

mately one third of cases but Kinzel (1976) observed a raised sedimentation rate in all cases.

Correct pre-operative diagnosis is rarely made. According to Martzloff (1940) only 6% cases reported in literature had correct preoperative diagnosis.

"Pap" smear is positive in approximately 50-60% cases. The incidence of positive cytology is higher if the surface of the tumor is sufficiently large, abdominal ostium is closed and the isthmic portion and cornua are patent. (Frankel 1956).

A perisistantly positive or suspicious "pap" smear with negative endometrial and cervical biopsies strongly raises a suspicion of fallopian tube or ovarian malignancy.

The treatment is total hysterectomy with bilateral salpingo-oophorectomy followed by postoperative irradiation. Five year salvage rate is poor ranging from 5 to 48% depending upon the extent of tumour and degree of differentiation.

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References

1. Boschann, H. W.: cited by Reference 9. Survey, 16: 209, 1961.
2. Frankel, A. N.: Am. J. Obstet. & Gynec. 72: 131, 1956.
3. Hayden, G. E. and Potter, E. L.: J. Obstet. & Gynec. 79: 24, 1960.
4. Kinzel, G. E.: Am. J. Obstet. & Gynec. 125: 816, 1976.
5. Martzloff, K. H.: Am. J. Obstet. & Gynec. 40: 804, 1940.
6. Miller, N. F.: J. Am. Med. Assoc. 136: 165, 1948.
7. Novak, E. R. and Woodruff, J. D.: Obst. & Gynec. Pathology, Saunders, Philadelphia, 7th ed. 1974.
8. Pauorstein, C. J. and Woodruff, J. D.: The Fallopian Tube, Baltimore. Williams and Wilkins Co., 2nd ed. 1969.
9. Sedlis, A.: Obstet. & Gynec. Surveys, 16: 209, 1961.

See Figs. on Art Paper VII