Primary Tubal Malignancy—an enigma – A case report

Anoop Sreevalsan*, 1, Kavitha2, Vasantha N.Subbiah3, Swayam Jothi S4

Associate Professor1, Senior Resident2, Professor & HOD3, Dept. of OBG, Chettinad Hospital and Research Institute, Chennai, India.
Professor & HOD4, Dept. of Anatomy, Sri Sathya Sai Medical College & Research Institute, Chennai, India.

Abstract
Cancer of the fallopian tube is exceedingly rare constituting about 0.3% of all gynecological malignancies. A 50 year old elderly woman with the c/o pain in the abdomen and mass descending per vaginum of one month duration came to the O.P and was examined and investigated. MRI revealed solid cystic mass 2.9x5.1x4.5 in the Right adnexal region. She was operated under spinal anesthesia. A mass in the Right tube with mixed solid and cystic consistency was removed and sent for HP examination and a final diagnosis of primary fallopian tube cancer was derived.

*Corresponding Author: Dr. Anoop Sreevalasan, Associate Professor, Dept. Of OBG, Sri Chettinad Hospital and Research Institute, Chennai, India. Email: anoopsreevalasan@yahoo.com

Introduction
Cancer of the Fallopian tube is one of the rarest of gynaecological malignancies comprising only 0.3% of it. Here a case of primary tubal malignancy is presented.

Case History
50 year old Mrs. I, was admitted with complaints of pain abdomen, more on the left side, mass descending per vagina for the past 1 month,there was no h/o watery discharge per vaginum, or of urinary/ fecal symptoms.
Married- 35 years. Menopause 15 years. Previous periods were normal.
Para 5 Live 5 all FTND 4 girls & 1 boy all alive & healthy LCB-25 years. Known DM / HT +
On examination she was not anemic, no supracervical lymphadenopathy.
Vital signs were normal, CVS & RS were normal, Abdomen was soft, Per speculum cervix healthy 1* descent of cervix +, cystocele+
Per vagina Cervix↑ uterus retroverted normal size fornices free.
Routine investigations were normal, Transvaginal ultrasound showed Right adnexal mixed complex mass 3.1 ×5.1 cm predominantly solid CT scan-within normal limits except for mild fatty liver. MRI scanlobulated solid cystic mass lesion 2.9x5.1x4.5 in right adnexal, no lymphadenopathy, no free fluid Imp:? Malignant Rt. Ovarian tumour CA-125 91.4 (Normal <35)
In view of the following findings she was taken up for Laparotomy. Under Spinal Anesthesia, abdomen opened by midline vertical incision.

Observations
A mass in the right tube about 2.5 ×4 cm with mixed solid and cystic consistency in the distal part. Right ovary, Left tube and Ovary and Uterus normal (Fig-1-4) No ascites hence peritoneal washings were taken.
Omentum normal, no palpable nodes, liver, undersurface of diaphragm, other abdominal organs normal.
Primary Tubal cancers are classified as

1. Adenocarcinoma, Papillary, Papillary-alveolar, Alveolar-medullary
2. Sarcoma
3. Choriocarcinoma

Most present after menopause with the mean age being 56 years as is seen in our case. Most patients are nulliparous [45%] and are infertile [71%]. Tumour spread is identical to ovarian cancer & metastasis to pelvic and paraaortic nodes are common. Cancer of the tube usually distends the lumen with the tumour. The tumour may protrude through the fimbrial end and the tube may be retorted, resembling a hydrosalpinx. The predominant pattern [95%] is papillary with a gradation through alveolar to solid as the differentiation decreases. Bilaterality is found in 40-50% of cases and this is believed to represent synchronous neoplasms rather than metastatic disease from one tube to another. Classically the neoplastic fallopian tube contains solid or necrotic cancer tissue and a dark brown or serosanguinous fluid. The FIGO staging is clinical similar to that of ovarian cancer. Otherwise a better staging is the modified Erez’s classification

Stage 1 tumour limited to the tube, either mucosal or with muscularis invasion.

Stage 2A Tumour has breached the serosa but there is no invasion of adjoining organs

Stage 2B Tumour invading surrounding pelvic organs

Stage 3 Metastatic lesions outside the pelvis but within the abdominal cavity

Stage 4 Extra-abdominal disease

Discussion

Cancer of the Fallopian tube can be primary or secondary. It is exceedingly rare constituting about 0.3% of all gynaecological malignancies. Most are usually secondary with the primary in the ovary, breast and gastrointestinal tract. Only early fallopian tubal cancer can be distinguished with certainty. Primary carcinoma of the Fallopian tube is the least common cancer arising in the female genital tract accounting for approximately 0.5% of all such cancers. Fewer than 3000 cases have been described in literature to date. The first case of tubal cancer was reported by Renaud to a meeting of the Manchester pathological society in 1847 while the first published case report appeared in 1888. The criteria of Hu et al are needed for it to be labeled primary fallopian cancer – the tumour should arise from tubal epithelium with the majority of the cancer located in the tube, that the histological features resemble a tubal pattern, that there is a demonstrable area of transition between normal and malignant endosalpinx and that the uterus and ovaries are either normal or contain less tumour than the tube. Here it is evidently a primary tubal cancer as the ipsilateral ovary is normal and secondly the capsule is intact.

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Conclusion

Most cases of tubal cancer are diagnosed at laparotomy; the diagnosis is rarely considered preoperatively as in our case where we thought of ovarian cancer. The usual presenting symptoms are postmenopausal bleeding, watery discharge and lower abdominal pain. Rarely patients present with the symptom complex referred to as hydrops tubae profuens or Latzko’s sign which is a watery vaginal discharge and a palpable adnexal mass. Our case is unusual in that she presented with prolapse which was unrelated. The management is as for ovarian cancer i.e. total abdominal hysterectomy and bilateral salpingo-oophorectomy. Postoperative chemotherapy will be required with platinum analogues for all but the earliest cases. The overall 5-year survival rate is 35%. The 5-year survival for stage 1 is 70%. She was reviewed by the medical oncologist and planned chemotherapy with 6 cycles of Carboplatin.

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