Malignant mixed germ cell tumour of the ovary presenting as chronic ectopic pregnancy

Rajaram S • Deb Geeta • Goel N • Nalini • Singh KC

Depts. of Obstet. & Gynaecol. and Pathology, University College of Medical Sciences and Guru Teg Bahadur Hospital, Delhi - 110095.

Mrs. B, a 23 year old P_2L_2 was admitted to the emergency gynaecologic casualty on 3/10/96 with pain in lower abdomen of one month's duration. Pain had increased in severity 3 days before admission. She had no bleeding per vaginum and no bladder or bowel sysptoms. She had two full term normal uneventful vaginal deliveries, the last being 14 months back and she was having lactational amenorrhoea. She did not practice any contraceptive method.

On examination she had moderate pallor and tachycardia but blood pressure was normal. Cardiovascular and respiratory systems were also normal.

Per abdominal examination revealed a suprapubic mass of 14 weeks gravid uterus size, firm in consistency and tender to touch with restricted mobility. There was no hepatosplenomegaly or free fluid in the abdomen. On per speculum examination cervix and vagina were healthy. The same mass was palpable per vagina projecting into the pouch of Douglas (POD) and extending to the right pelvic wall and relatively fixed. Uterus could not be felt seperately.

Urine pregnancy test was positive and serum β-hCG was 276mlU/mL. Haemoglobin was 9gm%, blood group O positive and X-ray chest normal. On ultrasonography a complex mass with a few cystic spaces 7 x 10 cm size was seen. The uterus was normal in size.

The clinical features of pain in abdomen, amenorrhoea, positive pregnancy test, raised serum β-hCG and a complex mass on ultrasonography suggested a chronic ectopic pregnancy and a decision for laparotomy was taken. Laparotomy revealed a fleshy haemorrhagic mass resembling placental tissue.The mass was fixed to the POD but could be delivered easily. The left tube and ovary were normal. The right tube was also normal. Origin of the mass from the right ovary was identified by attachment of the ovarian ligament. Even at laparotomy diagnosis eluded us and ovarian pregnancy and malignancy were thought of. A right salpingo-oophrectomy and left tubal ligation were performed.

Postoperative period was uneventful. Histopathology reported a malignant mixed germ cell tumour, the predominant component being endodermal sinus tumour. Postoperatively the serum β-hCG was 80 mlU/ml and serum alpha-fetoprotein (AFP)6080ng/mL. Ultrasound study of abdomen was normal. 4 courses of BEP (bleomycin, etoposide and cisplatin)were given. Patient tolerated chemotherapy well although the etoposide dose was halved when the platelet count fell below $100x10^9$/ml after the second course of chemotherapy. Patient was asymptomatic for 4 months. At a follow-up visit on 18/02/97 she complained of pain in abdomen of two days duration. Alpha-fetoprotein levels were 4827 ng/mL and serum β-hCG 20mlU/mL. Pelvic examination revealed a firm fixed mass on the right side measuring 7x7 cm in size. On re-laparotomy a right-sided tumour 8x7x7 cm adherent to the uterus was seen. Utrus was normal, and left ovary cystic. There were multiple deposits on the pelvic peritoneum and an omental mass measuring 6 x 6 cm. Total abdominal hysterectomy with left salpingo oophorectomy, omentectomy and debulking of the tumour were done. Post-operative period was uneventful but patient refused further chemotherapy and was discharged. This case is reported to highlight its unusual presentation. Malignant germ cell tumours of the ovary are known to occur in the second and third decades of life and association with pregnancy is not uncommon. When mobile masses are present with or without pregnancy diagnosis is straight forward. But the presence of a fixed mass with pain in abdomen, amenorrhoea and a positive pregnancy test all favour a chronic ectopic pregnancy, the occurrence of which is much more common than malignant germ cell tumours. Thus, as in all difficult clinical situations a high index of suspicion is required to make the diagnosis.