Case Report

Vesico Vaginal Fistula after Interval Debulking in Epithelial Ovarian Cancer

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Mrs. S.E, 45 years of age was diagnosed as a case of ovarian carcinoma and had interval debulking, following which she developed vesico-vaginal fistula. Continuous bladder drainage was done for 6 weeks and she was given post operative chemotherapy with cisplatin and gemcitabine. On her 6 weeks postoperative examination, the fistula had healed completely. She is receiving her chemotherapy cycles and is in satisfactory condition. Key words: Ovarian carcinoma, interval debulking, vesicovaginal fistula

Case Report

Patient's history dates back 6 months when she noticed abdominal distension which was sudden in onset, painless with no associated nausea, vomiting or any other complaint. History of backache and generalized weakness and history of irregular vaginal bleeding for last 2 ½ years but patient did not seek any treatment for that. No history of pain lower abdomen, vaginal discharge, urinary or bowel complaints, weight loss or loss of appetite.

Patient went to some hospital where she was examined and following investigations were carried out. On ultrasonography18x16cm complex mass in left adnexa adherent to uterus anteriorly was seen. Right adnexa was clear, mild to moderate ascities was present. She was sent to Mayo Hospital Oncology Department. Her CA 125 was 475,000 iu/ml and peritoneal taping was positive for malignant cells. Chest x-ray showed basal pleural effusion.

She was diagnosed as a case of adenocarcinoma of ovary. She received 2 courses of neoadjuvant chemotherapy with cisplatin and gemeitabine to reduce the size of tumour and amount of ascities and pleural effusion. She was referred for interval debulking surgery to Ghurki Trust Teaching Hospital.

Regarding gynaecological history, age of menarche was 13 years, previous menstrual cycle were 6/30 regular and for last 2 ½ years, 8-10 after irregular interval of time. Now she has amenorrhoea for last 3 months, bilateral tubal ligation was done 17 years back and cervical smear was never taken.

Regarding obstetric history, she is P_6A_0 . All were full term home deliveries without any antepartum intrapartum or postpartum complications. All children are alive and healthy, were breast fed and vaccinated. No history of diabetes, hypertension, ischaemic heart disease or any other malignancy.

On general physical examination; a middle aged lady, well oriented in time and space and cooperative, pulse was 80/min (regular & good volume), BP 130/80mmHg and temperature 99°F. All other signs like pallor, cyanosis, jaundice, oedema and clubbing were not present. No

lymph adenopathy was detected. Thyroid gland was not enlarged and breast examination was normal.

No obvious abnormalities in cardiovascular and respiratory tract examination was seen. The abdomen was protuberant, bilaterally symmetrical. No stria, scar mark or pigmentation was seen. No tenderness or viseromegaly was detected on palpation and bowel sounds were present.

Bimanual examination showed a mass of about 6X4cm on the left side firm, non tender with restricted mobility, inseparable from the uterus, right fornix was clear.

Rectal examination showed a mass anteriorly but rectal mucosa was intact. Sphincter tone was normal.

Her investigations were as follows: Hb%12.4gm/dl, TLC 8200/mm³, DLC Neutrophils 69%, Lymphocites 27%, Eosinophils 2%, Monocyte 1%, ESR 71mm, Urine C/E was clear, BSR 128mg/dl, blood group B +ve, RFTs urea 35mg/dl, creatinine 1mg/dl, LFTs total bilirubin 0.7mg/dl, SGPT 20u/ml, SGOT 27u/ml, alkaline phos 156mg/dl, chest x-ray was normal, ECG was normal and CA 125 was 366iu/ml.

On CT abdomen and pelvis left ovarian cyst of 6X3cm with solid component and internal septations. Omental thickening was seen in the pelvic region. No ascites was seen. All other viscera were normal looking and no pelvic or para aortic lymph adenopathy was detected.

Her staging laparotomy was done on 6th January 2005 after all these investigations after preanaesthetic evaluation.

Staging laparotomy:

Abdomen was opened by midline incision which was extended upto xiphisternum. Minimal amount of straw coloured fluid was present and peritoneal washing were taken and sent for cytology. Uterus was bulky, A complex mass of 6X4cm in left adnexa, adherent anteriorly to uterus right ovary also showed 3x4cm cyst which was adherent to the gut posteriorly.

Uterus c ervix and broad ligament was studded with tumour. Multiple seedlings of 0.5-2cm were present all

over the omentum and omental cake was formed. Seedlings were also present all along the pelvic wall and in uterovesical pouch and pouch of Doughlas. Both small and large gut was healthy looking, but adherent to mass in the pelvic region; liver surface was smooth adhesionolysis was done. Total abdominal hysterectomy with bilateral salpingoophorectomy and infra colic omentectomy done. Surgically it was stage IIIB carcinoma of ovary.

Histopathology:

Histopathology of specimen received on 15th January 2005 which also turned out to be papillary serous cyst adenocarcinoma of ovaries, chronic cervicitis, simple endometrial hyperplasia, adenomyosis, metastatic carcinoma of omentum and peritoneal washings were also positive for malignant cells.

Postoperative management:

Patient remained stable during her stay but on 10th postoperative day she developed incontinence of urine and on evaluation by dye test spillage of dye was seen from left side of vault and therefore a diagnosis of vesicovaginal fistula was made.

Patient was catheterized with silicon catheter for continuous drainage keeping in view that small fistulas may heal only by continuous drainage. Patient was also advised to have increased fluid intake and antibiotic cover was given.

Re-evaluation and repair of vesico vaginal fistula planned after 12 weeks and patient sent back to Mayo Hospital for completion of chemotherapy on 24th January 2005. Patient was a dvised to have monthly follow up on which her symptoms gradually improved. Patient received 3 more courses of chemotherapy there and came back again on 31st March 2005 after completion of 2 months with no leakage.

She was again evaluated by dye test and this time no spillage of dye was seen. Patient was admitted and her intermittent catheter clamping was started and interval of clamping was gradually increased from ½ hour to 1½ hour and catheter was removed when patient was able to hold urine for $1\frac{1}{2}$ hour.

Patient was kept under observation for next 48 hours in which she passed urine normally. No residual urine was detected on USG. Patient was discharged in satisfactory condition with weekly follow up advice and referred back to Mayo Hospital for further evaluation and management.

Her last follow up was on 30th June 2005. She is continent, and well. Her last chemotherapy was done on 25th June 2005 and CA 125 is 10iu/ml.

Discussion:

The amount of residual tumour after primary surgery was an important prognostic factor in advanced carcinoma of ovary – stage III & IV^{1,2}.

This was documented by a meta-analysis of 6885 patients in stage III & IV of ovarian cancer. The overall survival was related to the maximal cytoreduction and median survival time³.

Interval debulking is defined as an operation performed after a short course of induction chemotherapy, usually two or three cycles⁴. This is specifically done in patients who did not or could not have a successful primary debulking procedure (reduction of disease to <1cm)⁵.

Numerous single institution studies have demonstrated that a high percentage of patients (60%-90%) are able to be optionally debulked after neoadjuvant therapyu^{6,7,8}.

The patients who are not candidates for interval debulking are those who have more than 2cm metastases around superior mesenteric artery or porta hepatic, age more than 80 years, poor performance status, or intrahepatic metastases⁹.

The various complications associated with interval debulking include fistula formation – urinary or intestinal, abscess requiring re-laparotomy and haemorrhage¹⁰. This is more common with surgery for cervical cancer¹¹ but is also a complication seen with debulking surgery for ovarian cancer¹².

This patient was also a candidate for interval debulking and developed a known postoperative complication i.e., urinary fistula formation. Small fistulas formed during such surgery can heal spontaneously with continuous drainage and postoperative chemotherapy which aids in further reducing the tumour area. Since fistula can form due to surgical injury, because of presence of tumour or during healing in immunocompromised patient, conservative management to heal small fistulae is the first line of management. This patient was also managed in a similar fashion and the fistula healed in 6 weeks time. Meanwhile, she received two courses of postoperative chemotherapy.

Conclusion:

Interval debulking for advanced ovarian cancer is now a known way of treatment. It has known complications which can sometimes be managed conservatively. This results in improved quality of life and survival.

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