Removal of Massive Ovarian Tumor Weighing 35.4 kg in a Tertiary Care Hospital: A Case Report

¹Mriganka M Saha, ²Mainak Nath, ³Joydeep Neogi, ⁴Madhukar Harani, ⁵Arabinda Majumder, ⁶Soumyabrata Mitra

ABSTRACT

Massive ovarian tumors are rarely encountered in our clinical practices and the most common reason is ignorance about the pathology and its sequences. Many complications are associated with it starting from the preoperative, intraoperative and postoperative period. Here we are reporting a case of massive bilateral ovarian tumor weighing 35.4 kg (weighted after removal). She underwent a successful operation and discharged from the hospital on tenth postoperative day. Histopathology examination has revealed papillary serous cystadenocarcinoma of one ovary and borderline mucinous tumor of another ovary.

Keywords: Massive, Ovarian, Tumor.

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BACKGROUND

Massive ovarian tumor is difficult to encounter in our daily practices. Prostate, lung, colorectal, and ovarian (PLCO) cancer screening trial has cited about 14% incidence of simple ovarian cyst in women aged over 55 years, but the specific incidence of massive ovarian tumor is difficult to find out as it is a rare event. But, it is challenging to the clinician to operate successfully and uneventful postoperative recovery. The complica-

Corresponding Author: Mriganka M Saha, Assistant Professor, Department of Obstetrics and Gynaecology, College of Medicine and JNM Hospital, Kolkata, West Bengal, India, e-mail: itsmemriganka@yahoo.com

tions are associated in preoperative period twisting and acute abdomen, intraperitoneal rupture, shock with collapse; intra-operative period sudden hypotension after tumor removal, third space fluid loss, decompression of intra-abdominal organs along with inferior vena cava, postoperative prolong immobility, more pain associated with a large incision, suture line disruption, and many more.² Staging laparotomy is always to be performed as either the tumor may be malignant, or there may be focal malignant changes which are often failed to reveal in frozen section histopathology.³

CASE DESCRIPTION

A patient XX came to gynecology outpatient department (OPD) with chief complain of huge swelling over the abdomen extending from lower part of the chest to lowest part of the abdomen with anorexia, generalized weakness, cachexia and other ominous features of malnutrition. She was unable to move alone without any support. She was suffering for the last 3 years which has increased in size rapidly in the last 6 months and has reached up to the lower part of the chest process. Cachexia and anorexia were progressive. She was also suffering from occasional breathlessness which is also increasing in nature. She was 56 years old and has attained menopause 15 years back. She was married in the age of 17 years and her husband died 10 years back. She was P1 + 0 with a boy of 40 years old. She used to live in a broken nuclear family with her kin. Her son works as a non-professional worker. The annual income of the family is below the poverty line. There was no history of any, and pelvic pathologies in the family except her mother had suffered from pelvic organ prolapse. Our patient has never suffered from any major surgical or medical illness. Her son is mentally retarded since birth. She has never been addicted to anything. On admission her vitals were like this blood pressure 90/50 mm Hg, pulse rate 78/minute, heart sounds—regular, both S1 and S2 audible with no added sounds. Breath sounds were bilateral vesicular breath sounds, respiratory rates 28/min, and oxygen saturation was 99% in room air. GI system could not be examined properly as it was mostly covered by the lump. On neurological examination, no neuro deficit was found and all the superficial and peripheral reflexes were within normal limit. Per abdomen, examination revealed

^{1,5}Assistant Professor, ^{2-4,6}Junior Resident

¹Department of Obstetrics and Gynaecology, College of Medicine and JNM Hospital, Kolkata, West Bengal, India

²⁻⁴Department of Obstetrics and Gynaecology, College of Medicine and JNM Hospital, Nadia, West Bengal, India

^{5,6}Department of Anesthesiology, College of Medicine and JNM Hospital, Nadia, West Bengal, India

abdomen massively enlarged and fully covered by lumps extending up to the xiphisternum from symphysis pubis. The skin over the abdomen looked shiny and visible vasculature. There was no local rise of temperature, surface smooth, mobility diminished, consistency solid-cystic, no localized tenderness over the mass and fluid thrill was absent. On internal examination; cervix pushed down and vaginal length shortened, adnexa with parametrium all covered by the lump, and there was no movement of cervix on moving the mass abdominally in the bimanual examination. One large cystic space occupying lesion with multiple septations and solid cystic was found in the abdomen possibility of ovarian origin measuring 60 imes 50×35 cm, free fluid in POD, liver, and spleen was visualized with difficulties and appeared normal size and echotexture. The complete blood counts were Hb 12 g%, TLC 14,000/cumm, platelet 147,000/cumm, blood group B rhesus positive. Routine blood biochemistry had revealed no abnormality in the measured values. The serum CA 125 was marginally raised and it was 55IU/L. We have calculated the RMI was 495. Preoperative echocardiography was normal. We have planned for laparotomy. Considering the age and extent of the SOL, the patient was put under general anesthesia. The abdomen was opened by midline longitudinal incision, starting from the symphysis pubis up to the xiphoid process. On the opening abdomen, we had drained out about 1.6 liter of ascitic fluid, and subsequently, the tumors came out readily due to pressure effects. One large tumor was delivered originating from the right ovary and it was folded three times upon its axis and after unfolding, it was measured about $165 \times 85 \times 34$ cm. There was another tumor originating from left ovary and it was measured about $58 \times 45 \times 30$ cm. Together both of these weighed about 35 kg 400 g (Fig. 1), and there was no spillage as the capsules were intact even after tumor removal. Numerous small vasculatures likely to be feeding vessels were found from the surrounding parietal wall of the abdomen and separated by blunt dissection. The

abdominal wall was thinned out due to pressure effects of the tumors. Both side tube and the uterus were normal in size and shape. Total abdominal hysterectomy was done with bilateral salpingo-oophorectomy along with infracolic omentectomy. Peritoneal lavage with isotonic normal saline was given and peritoneal washings were sent for papanicolaou staining for malignant cytology. The intra-operative staging was performed and it was concluded as stage IB ovarian tumor. The entire specimen removed was sent for histopathology. The histopathology report came as papillary serous cystadenocarcinoma of right ovary and borderline mucinous tumor of the left ovary. There was no malignant cell in peritoneal washings, and the omental specimen was free of any malignant deposits.

DISCUSSION

Massive ovarian tumors are better to be managed in a tertiary care center because of multidisciplinary team approach can deliver a better quality of care for the successful outcomes. 4 Poor health knowledge and ignorance about health education is mostly responsible to grow a tumor up to a massive size. Usually benign varieties of tumors present as massive ovarian tumor but sometimes there may be focal borderline or malignant changes due to prolong duration. Imaging and calculating RMI is a massive ovarian tumor is another difficult work due to poor visibility of adjacent intra-abdominal organs and only the mass can be visualized.⁵ However, consistency and septation can be evaluated well, though the size and origin may often be disguised. Computed tomography scan may be superior for evaluating the status of the retroperitoneal lymph nodes only.

Intraoperative spillage can upgrade the tumor staging and affect future prognosis. Gradual delivery of the tumor is recommended to avoid the compression and sudden decompression sequence. Extensive sudden hypotension may lead to collapse. After tumor delivery thorough peritoneal lavage and staging laparotomy is to be performed



Figs 1A and B: Bilateral massive ovarian tumor removed by laparotomy. (A) Right ovarian tumor (papillary serous cystadenocarcinoma); (B) Borderline mucinous tumor of the left ovary



for the intraoperative stating. Conventional starting is from right lower quadrant in a clockwise manner along with superficial palpation of liver, spleen and para-aortic region for any palpable lymph nodes. Peritoneal washing should be evaluated for exfoliative cytology for the malignant cells. Resection of infracolic omentum is safe to perform but if not performed then omental biopsy must be taken at least to rule out malignant metastasis. Prediction of pathology in term of malignancy is very difficult as there may the focal areas of malignant changes which often missed in frozen section biopsy. Postoperative monitoring with serial hematocrit and electrolytes along with prophylactic low molecular weight heparin are required.

CONCLUSION

Multidisciplinary care is required for successful management of a massive ovarian tumor in a tertiary care center.

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