NJOG 2008 Nov-Dec; 3 (2): 51 - 53

CASE REPORT

Fifteen year history of a huge ovarian serous cystadenoma in association with uterovaginal prolapse

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Abstract

A huge ovarian cyst, twice tapped and existing for 15 year, longest duration ever reported in literature and for the last seven years complicated by uterovaginal prolapse is reported here to give an idea about the reproductive morbidity status of socially deprived or underprivileged Nepalese woman in rural community.

Abdomino-vaginal surgical approach was combined to drain 16 liters of fluid from the ovarian cyst and excise the tumor capsule by initiating hysterectomy abdominally including the steps up to the ligation of uterine artery thereafter completing the procedure vaginally by taking over the cardinal ligaments, thus facilitating delivery of uterus with its appendages with pelvic floor repair for third degree uterovaginal prolapse.

Key words:Abdomino-vaginal surgical approaches, coexistence of uterovaginal prolapse and ovarian cyst, huge ovarian cyst, huge amount of intracystic fluid.

Introduction

Presented hereby is a case of an underprivileged and socially deprived Nepalese woman from rural community with a huge ovarian cyst of 15 years duration which was aspirated twice in the health post and lately complicated by uterovaginal prolapse for the last seven years. This must be the one with longest duration of suffering from ovarian cyst. A case reported had six years history and the tumor was 70kg, the second heaviest on record was of a giant ovarian tumor that weighed 113 kgs. [1,2]

This case is rare because of the association of uterovaginal prolapse which is seen in very few number.[3] The other important aspect of this tumor is having 16L. of serous fluid inside, although 80L, 44.3L. and 20L.(tumor 64kg) of fluid has been aspirated from giant ovarian cyst.[4-6]

Some serous cysts have measured 35x45x50cm and others have weighed 30kg compared to which we feel this tumor with capsule measurement of 35x20cms in greatest dimension weighing 17kg seems much smaller.[7,8]

Case

Forty five years old $P_1 L_0$ from Nuwakot, admitted on 24th Jestha 2065 (2nd June 2008) with the complaints of gross abdominal distension for 15 years, uterine prolapse for 6-7 years, amenorrhea for a year and vaginal discharge for 2 months. The history was suggestive of the gradual onset of abdominal swelling giving rise to breathing problem in the past for which tapping was done twice. First one 14 years back and the last one was 7 years back when four and two liters of fluid were drained in the health post that relieved her from exertional dyspnea. This time she seeked for medical attention because of the annoying vaginal discharge on the top of gross abdominal swelling and uterine prolapse.

On examination, she was comfortable and weighed 57kg. Vital were stable. There was no pedal edema and no icterus either. Chest was clear, however the abdomen was hugely distended, girth at the highest level measuring 148 cm whereas no mass was palpable. Fluid thrill was present. There was third degree uterovagnial prolapse with cystocele and rectocele (Fig 1).

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Figure 1. ovarian cyst and prolapse

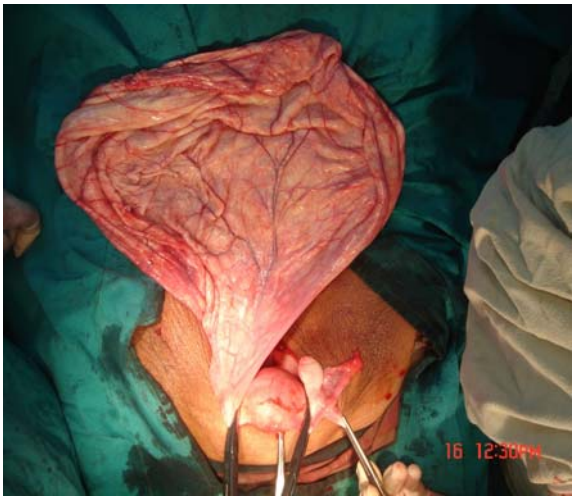

Figure 2. drained ovarian cyst (unilateral)

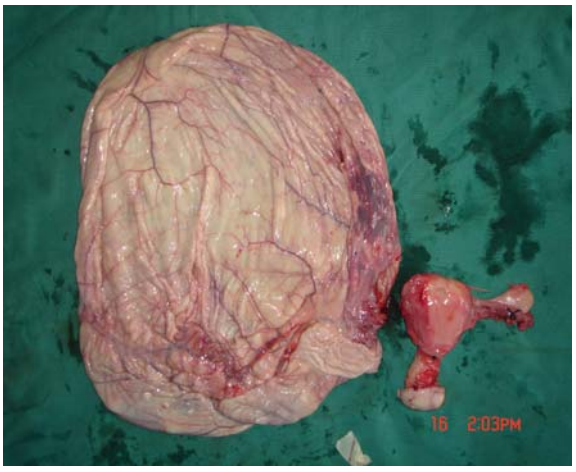

Figure 3. vaginal hysterectomy specimen with the left sided tube and ovaries

Ultrasound assured ovarian origin of this huge cyst, arising from the pelvis. With preoperative fitness for surgery; abdomen was opened with low vertical incision when glistening smooth surface with abundantly running blood vessels all over its surface was visualized. A purse string stay suture was applied over the substance of the cyst wall, incising at the center for the adjustment of suction drain. Over 20 mins, 16 L of greenish colored serous fluid was drained.

This enabled the delivery of the collapsed ovarian cyst (on right side) from the incision which earlier was expanded up to xiphisternum (Fig 2). After clamping the right sided infundibulopelvic ligament, the cyst was removed.

Abdomino-pelvic removal of uterus was considered to facilitate pelvic floor repair. For this the dissection upto the uterine artery level was performed from above, and abdomen closed. Vaginal procedure was proceeded routinely by giving inverted T shaped incision over the anterior surface cervicovaginal junction, carrying the T all around the cervix in circular fashion; just below the lower limit of bladder base. Vaginal mucosa was separated off the underlying fascia freeing cervix from bladder which was pushed up. Posterior dissection was carried in similarly by separating vagina from fascia underneath and thus opening the Douglas pouch. Then the Mackenrodts ligaments were clamped and divided on both side, which easily delivered the uterus with tubes and ovaries of left side (Fig 3).

Pelvic peritoneum was half closed allowing the passage of corrugated drain through the opening. Anterior and posterior repair was done accordingly. Vaginal packing was done.

She was transfused with 1 unit of blood to correct anemia postoperatively as her hemoglobin was 8.6 gm%. Vaginal pack was removed the next day.

Halothane induced jaundice observed on first post operative day (billirubin 71 ìmol/L; direct 14 ìmol/L with normal liver enzymes) cleared subsequently while the atelectesis of right lung discovered on the same postoperative day took awhile to improve pulmonary functions ascertained by oxygen delivery by face mask at the rate of 5L/m, monitoring SpO_2 by pulse oximetry, chest physiotherapy in combination with incentive spirometry.

Since there was minimal drainage vaginally, the corrugated drain and catheter were removed on third post operative day.

She was afebrile all through but could not balance until 12th post operative day when she was found out to weigh (40 kg), indirectly giving the weight of tumor as 17 kg. Sutures were removed and the patient was sent home after two weeks of surgery.

Comment

Management of third degree uterovaginal prolapse in association with huge ovarian serous cystadenoma containing 16L fluid, by combined abdominal surgical approach is described. This consisted of intra-operative drainage of fluid of the ovarian cyst and excision of the tumor capsule covering hysterectomy steps up to the ligation of uterine artery abdominally complemented by successful delivery of the uterus and other appendages from below vaginally after transection and transfixation of cardinal ligaments; thus completing the procedure by anterior colporrhaphy and posterior colpoperineorrhapy.

Uterine prolapse has been reduced after the ultrasound-guided needle aspiration of a voluminous ovarian cyst.[1]

Huge ovarian cyst of more than this dimension had difficult removal ending in copious intraoperative bleeding, at times needing up to 9 units of packed red cells and 25 units of fresh frozen plasma.[2,6] Currently intraoperative and immediate post operative hemorrhagic or pulmonary complication has been minimized by tapping the cystic fluid prior to surgery either on the same day or at a rate of 1L/hour in case of voluminous fluid measuring about 85L.[4] Slow drainage of 44.3 L fluid over two hours under epidural anesthesia preceded safe removal of the cyst, later on the same day under general anesthesia, successfully has been reported.[5]

It is surprising how 44.3L fluid can be tapped within 2 hour without any complications.[5] Minimization of the incision can be exercised for quicker wound healing although disagreement of pre and postoperative drainage has been opined by one report.[9]

Coping up with the demands of advanced technology today, decompression of large amount of fluid has been done under local anesthesia by insertion of a nephrostomy catheter placed into the cyst by the Seldinger technique followed by laparoscopic approach.[10] Laparotomy has been done to confirm huge serous adeno-ovarian cyst in accessory ovary.[11]

In this case pulmonary complication occurred after surgery and to prevent postoperative pulmonary oedema that may occur from altered mechanics of ventilation or ventilatory inadequacy with sequel of respiratory failure or pneumonia, ulinastatin, a protease inhibitor has been infused.[5] Conservative management by antibiotics, nebulizer and chest physiotherapy was helpful in our case. Described are rewarding management of ovarian tumors weighing more than 60 Kgs.[1,2,6, 12], numerous of them containing excessive amount of intracystic fluid.[4-6] Some of these giant ovarian cyst proven to be serous cystadenoma histologically.[4,7, 8,11]

Conclusion

A two stage procedure comprising of minimal incision laparotomy allowing the drainage of the abundant fluid content of a hugely enlarged benign ovarian cyst complicated by uterovaginal prolapse; for the convenience of vaginal removal of uterus is an appropriate procedure with safe recovery.

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