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Matured Ovarian Teratoma in a 65year Old Woman: A Case Report

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Abstract:
A case of a 65year old post-menopausal woman with matured ovarian teratoma is presented. Mrs. T.M was a 65year old P_5^{+1} (5 alive) who was 15years post-menopausal. She presented at the gynaecological outpatient department of Federal Medical Centre Makurdi, with about 2years' history of progressive abdominal swelling and distension. There was 9 months history of associated abdominal pain and weight loss. Clinical examination revealed a chronically ill-looking woman, with a grossly distended abdomen and massive ascites. Abdomino-pelvic ultrasonography showed a huge right ovarian mass that measured 20.3cm x25.0cm with cystic/ solid areas and massive ascites. She subsequently had exploratory laparotomy with total abdominal hysterectomy and bilateral salpingo-oophorectomy. She was discharged 2 weeks after surgery for follow – up at the gynaecological out- patient clinic.

Keywords*: mature ovarian teratoma, post-menopausal, oophorectomy*

1. Introduction

Ovarian cancer is the third most common cancer in women and the fourth most frequent cause of cancer death worldwide[1]. In the year 2000; 23,100 new ovarian cancer cases were diagnosed and 14,000 patients succumbed to the disease[2]. In general, ovarian cancer is a disease of the postmenopausal woman and the prepubescent girl, although it is documented to occur in females of all ages. In Nigeria, ovarian cancer is the second commonest cancer of the female genital tract with cancer of the cervix being the commonest[1, 3]. The cause of ovarian cancer is complex and depends on various aetiological risk factors including age, hereditary factors, incessant ovulation, tubal ligation, race, environmental factors, hormone replacement therapy with oestrogen-only pills, dysgenetic gonads and peutz-jegher's syndrome [1, 4].

Age is the single most important factor for ovarian cancer. Incidence of ovarian cancer increases with age. In the USA, the median age at diagnosis is 61years[2,6]. Women who carry germ line mutations of BRCA1 and BRCA2 genes have a range of 16-40% estimated risk of developing ovarian cancer by 70years of age compared with a lifetime risk of 1.7% in the general population[10]. Combined oral contraceptives reduce the risk of ovarian cancer by 30 – 60%, others are breast feeding, pregnancy at an early age and late menarche[2, 6].

Ovarian tumours are classified based on the embryological origin of cell type or histologic predominant cell type. These are epithelial, sex cord, germ cell and metastatic tumours. Germ cell tumours such as mature teratoma are common ovarian neoplasms, occurring primarily in women aged 20-30years[12].-However, the index case occurred in a 65year old post-menopausal woman thus necessitating this report.

2. Case Report

Mrs. T.M, a 65year old P_5^{+1}, illiterate, farmer who was 15years post-menopausal, presented with about 2years' history of progressive abdominal swelling and distension which she noticed while taking her bath. There was associated abdominal pain which was generalized, and weight loss of 9months duration. There was no history of jaundice or gastrointestinal symptoms. She had not sought medical advice until the symptoms became unbearable. She could not remember her age at menarche but breast fed her children exclusively. She was not aware of contraceptives.

On examination, the patient was chronically ill-looking but her vital signs were normal. She was afebrile, anicteric and not pale. The abdomen was grossly distended with scarification marks, tender and with demonstrable ascites. There was an abdominopelvic mass of about 30 weeks, freely mobile and tender. Other structures could not be appreciated because of the tenderness. Pelvic

examination revealed a healthy looking atrophic cervix. The uterine size and adnexia were difficult to assess because of tenderness. Her packed cell volume was 31% and abdomino-pelvic ultrasound scan revealed a huge right ovarian mass measuring 20.3cm x25.0cm with cystic and solid areas. There was massive ascites. The uterus was atrophic. The kidneys, liver, pancreas and other abdominal organs were essentially normal. She and her relations were counseled on the need for admission, further evaluation and surgery. Further investigations which included full blood count, serum urea electrolyte &creatinine, fasting blood sugar, chest x-ray and stool microscopy were done and were essentially normal.

At exploratory laparotomy, the findings were 4litres of clear ascitic fluid, filmy adhesions involving the large bowel and ovarian mass, huge right ovarian tumour that weighed 8.7kg, well encapsulated with cystic areas and none haemorhagic, atrophic uterus and left ovary with estimated blood loss of 200mls. The liver and gall bladder were grossly normal. She had total abdominal hysterectomy with bilateral salpingo –oophorectomy. She had antibiotics, analgesics and intravenous fluids postoperatively and tissue was sent for histology. The results came out to be mature teratoma. Her postoperative condition was uneventful. She was lost to follow-up after 6 months.

Figure 1: Huge Ovarian Tumour At Laparotomy
Figure 2: Huge Ovarian Tumor Post Op
(Informed consent was obtained from the patient to display these pictures)

3. Discussion

Mature cystic teratomas are teratomatous cysts lined predominantly by epidermis with skin appendages[2]. They occur most commonly during the reproductive years but may be seen at any age from infancy to old age as in this 65year old woman. They are bilateral in about 10% of cases with most tumours measuring less than 15cm in diameter.

Abdominal distension and mass, as in this patient remains the most frequent symptom but physical examination is often inconclusive. Ultrasonography is currently the imaging method of establishing diagnosis of ovarian tumours[12] and presence of ascites. The complimentary role of magnetic resonance imaging and CT scan has been described[5,12].

Once the diagnosis of ovarian tumour was made in this woman, she was evaluated and prepared for laparotomy. At laparotomy, the greatest challenge is usually in determining the extent of surgery if it is a malignant tumour which has metastasized. In this case, it was unilateral with benign features, except for the adhesions which were separated gently. She therefore had total abdominal hysterectomy with bilateral salpinggo-oophorectomy. In young patients with small tumours, conservation of the healthy contralateral ovarian tissue should be attempted if possible, though there may be risk of recurrence in about 8% of cases[8]. Some authors have advocated that in elderly women, such as this 65year old woman, contralateral oophorectomy should be done. However, it was not done because there is a risk of ovarian cancer arising from the atrophic left ovary.

In conclusion, histological diagnosis is very important in patients with ovarian tumours irrespective of their age, to determine the mode and extent of treatment. Even though matured teratomas occur in younger age group, they may also be found in elderly women as was reported in this case.

4. References

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