DERMOID CYST OF OVARY – RARE GROSS APPEARANCE

Aruna Kumar¹, Shabana Sultan², Surbhi Gupta³

HOW TO CITE THIS ARTICLE:

ABSTRACT: Mature teratoma is the most common germ cell tumor (and the most common tumor) of ovary, composing more than 20% of all ovarian neoplasms. However cut section of dermoid ovarian cyst showing multiple (about 600) sebaceous balls of varying size and three big balls containing hair inside the cyst is a rare gross appearance.

KEY WORDS: ovary/dermoid cyst/sebaceous balls

INTRODUCTION: Germ cells tumor constitutes 15-20% of all ovarian tumors and majority of them are mature cystic teratoma¹. Mature teratoma is the most common germ cell tumor (and the most common tumor) of ovary, composing more than 20% of all ovarian neoplasms and occurring at any age, with a peak incidence in first two decades of life²,³. The clinical manifestations of this slow growing lesion is usually related to its size, compression or torsion or chemical peritonitis secondary to intraabdominal spill of cholesterol laden debris. Herein we present a case of dermoid ovarian cyst with a rare gross appearance.

CASE REPORT: A 30 year old woman, regularly menstruating, Para 4, approached to gynecological outpatient department of Sultania Zanana Hospital, Gandhi medical college, Bhopal on 5th September 2012 with complaints of lump and lower abdominal pain since 6 month. On examination her vital parameters were stable. Systemic examination revealed no abnormality. It was ascertained that her last labour was two years ago, and that all deliveries were vaginal. On per abdomen examination a lump of 24 week uterine size mobile and cystic in consistency was found. Per speculum examination showed cervix and vagina normal. Per vaginal examination revealed uterus to be retroverted, normal size and a 24week size cystic and mobile lump was present anterior to the uterus. Patient was admitted and investigated. Her blood cell counts and biochemical parameters were normal. The results of tumor marker analysis performed preoperatively showed the following value CA125 - 8IU/ml (normal: 0-35IU/ml). Ultrasonography examination revealed a large cystic mass in right adnexa containing within it numerous floating, highly echogenic round masses suggestive of right ovarian cyst (dermoid cyst). The other ovary and uterus appeared normal, upper abdomen did not reveal any mass. Patient was taken for laparotomy on 12th September 2012. On opening the abdomen a huge right ovarian cyst was found of size 18x 22cm. It was not adherent to other organs. There was no torsion of right ovary. Uterus, left tube ovary were normal. Right sided salpingo-oophorectomy was performed. In cut section a cystic mass was found full of viscous, fatty fluid. There were multiple (about 600) yellow-white sebaceous balls of varying size and three big balls containing hair inside the cyst. No calcification or tooth element was found on gross examination. The histopathological diagnosis was a benign cystic teratoma. The patients post operative course was uneventful. No recurrence was seen in the final follow up for post operative two years.
DISCUSSION: Benign cystic teratomas, among the most common ovarian neoplasms (15%–25%), are derived from the primitive germ cells of the embryonic gonad. They occur most often during active reproductive years, are rare before puberty, and are not infrequently seen in postmenopausal women. Although they contain well-differentiated derivatives of the 3 germ layers 4-5 ectoderm, mesoderm, and endoderm, ectodermal elements generally predominate; therefore they are also called dermoid cysts. Dermoid cysts tend to remain concealed unless they assume such a size as to produce a palpable abdominal mass or to cause pain as a result of torsion, the most common complication caused by the long pedicle they have. Some asymptomatic dermoids are detected incidentally on abdominal radiography, showing calcification or “tooth.” Other less common complications are rupture (1%) and malignant transformation (2%) 6. The radiologic diagnosis of cystic teratoma can be made readily on the basis of sonography, CT, or magnetic resonance imaging. Because an ovarian tumor may contain a large number of recognizable tissues, including matted hair, well-formed teeth, and semisolid sebaceous material, the variety and preponderance of internal contents presumably account for the spectrum of sonographic appearances. However in our case there was no calcification or tooth like structure seen on sonography. On review of literature, we found only a small number of cases of cystic teratomas with multiple mobile spherical masses. These have been found in the ovary, 7-8 retroperitoneum, 9 and mediastinum 10. The composition of these masses was different in different locations: in the case of a cystic teratoma of the ovary, the nodules consisted of sebaceous debris with skin squames and hair 8; and in a mature cystic teratoma of the mediastinum, mobile globules consisted of paste like material, fat, and hair 10. In a retroperitoneal mature cystic teratoma, fat deposition was seen around hair tissue 9; these spherical structures have been called intracystic fat balls 7-9. In our patient, spherical masses consisted of paste like material and fat, and some containing hair in it. On sonography, there were multiple round, floating, and echogenic fat balls seen within the large anechoic cyst. According to Kawamoto et al, 11 the appearance of multiple spherules floating within a pelvic cystic tumor has not been found in other tumors; therefore, this appearance is pathognomonic for a cystic teratoma. In summary, unusual associated findings of a mature cystic teratoma may result in occasional diagnostic difficulty. Only a small number of cases of cystic teratomas with multiple mobile spherules or globules have been reported.

REFERENCES:


Multiple sebaceous balls in cut section of dermoid cyst

large dermoid cyst during laprotomy.
AUTHORS:
1. Aruna Kumar
2. Shabana Sultan
3. Surbhi Gupta

PARTICULARS OF CONTRIBUTORS:
1. Professor & H.O.D, Department of Obstetrics & Gynecology, Gandhi Medical College, Bhopal.
2. Assistant Professor, Department of Obstetrics & Gynecology, Gandhi Medical College, Bhopal.
3. Resident, Department of Obstetrics & Gynecology, Gandhi Medical College, Bhopal.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Shabana Sultan,
H. No. 1/115, OPD Block, Doctors Campus,
Sultania Lady Hospital, Bhopal,
M.P. – 462001.
Email- shabby_2k2@yahoo.com

Date of Submission: 04/08/2013.
Date of Peer Review: 05/08/2013.
Date of Acceptance: 08/08/2013.
Date of Publishing: 27/08/2013