

Case Report

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Markedly Raised Ca-125 In A Case of Bilateral Ovarian Endometriosis Mimicking Ovarian Cancer: A Case Report

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Abstract

We report a case of bilateral endometriosis with very high Serum CA 125 levels who presented with pain abdomen. Intra operative finding suggestive of stage IV endometriosis which finally proved in histopathological report. We conclude that very high CA 125 may not be always indicative of ovarian cancer.

Keywords: Very high CA 125, Endometriosis, Ovarian Tumour

Case Presentation

A 28 years-old unmarried female patient presented to our hospital with complains of pain abdomen. Her menarche was at 13 years old. Her past medical history was unremarkable except a single episode of severe lower abdominal pain. She had regular menstrual cycle with occasional mild degree of dysmenorrhoea. Her transabdominal ultrasound revealed a normal uterus with right adnexal region showing complex cystic mass 75×70 mm with small cystic area with homogenous internal echoes. Left adnexa showed another cystic mass of size 71×63mm with homogenous internal echoes. Ultrasonographic picture suggested the diagnosis of ovarian endometrioma. Magnetic resonance imaging (MRI) revealed normal uterus and 85×85mm Masson right side with a septa and 69×68 mm mass on left side without ascites and lymphadenopathy, which favoured a benign ovarian cystic tumour, likely endometrioma on examination, patient was afebrile and normotensive(100/70mmHg). Her biochemical parameters and hemogram were normal. Her Serum CA-125 level was markedly raised upto 2048 U/ml (normal: below 35 U/ml). Alpha feta protein (AFP) level of 1.66 ng/ml and carcinoembryonic antigen (CEA) level of 0.3 ng/ml were within normal limits. Upper and lower gastrointestinal endoscopy was normal. Based on raised CA125 and radiological findings the patient was scheduled for an exploratory laparotomy. Laparotomy revealed abdominal wall and omentum were haemosiderin stained, uterus was not visualised due to presence of bilateral adnexal masses. Bowel was adherent with masses and fallopian tubes were buried under adhesions. There was evidence of bilateral cystic masses approximately 9×10 cm on right side showing thick chocolate-coloured fluid. The cyst wall was excised and remaining normal ovarian tissue approximated. Similar cyst was

also seen in left adnexal region for which cystectomy was done followed by ovarian reconstruction. Cyst wall was sent for frozen section. The fallopian tubes bilaterally were freed from adhesions. Endometrial tissues were disseminated all over the sigmoid colon, peritoneum and rectovaginal pouch. The diagnosis of stage IV endometriosis was made which was subsequently confirmed on histology report (frozen section and final Histopathology report). Patient had an uneventful post procedure recovery.

Discussion

Bast et al identified CA-125 as an antigen and considered to be marker of ovarian malignant pathology. Approximately 1 % of healthy women and 6.3% of women with benign disease may show raised levels [1,2].

A Plasma CA-125 level of more than 194 U/mL is found to differentiate malignant from benign pathologies of pelvis. It is a general notion that higher the value of CA125 there is higher likelihood of mass being malignant [3].

Occasionally higher CA-125 is seen in conditions that are benign such as endometriosis, adenomyosis, PID, and uterine fibroids. It is also raised in physiological conditions such as menstruation and early pregnancy [4].

Commonest condition associated with elevated levels of CA-125 is endometriomas however the levels are seldom more than 100 IU/ml [5].

The cause of elevated serum CA 125 titres is not fully understood

and multiple mechanisms have been explained. One of the reasons is likely to be enlarged surface area of the endometrium secreting CA 125. CA 125 concentration in fluid of cystic component of an ovarian endometrioma is quite high, however its thick walls prevent these glycoprotein CA-125 macromolecules from completely reaching the blood circulation [6].

Other causes are peritoneal mesothelial cells as a potent source of CA 125, overflow of endometrioma fluid causing peritoneal inflammation and endometrial deposits over the ovary secreting CA 125 spilling into the peritoneal cavity [7,8].

Very high CA 125 in present case could be because of rupture of endometriotic cyst in to peritoneal cavity. It was evident by intra-operative findings where peritoneum, omentum, sigmoid colon all were stained with chocolate material.

Findings in this case are similar in case reported by Rani A k et al who has mentioned very high CA 125 value which could be because of ruptured endometriotic cyst [9].

To conclude, CA-125 is known as a marker for ovarian malignancy however it may be raised in many other conditions. Raised CA-125 should not be solely seen as criteria for malignant disease and other clinic radiological investigations must be taken into consideration to reach the appropriate diagnosis. Disseminated endometriosis can lead to very high CA 125.

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