Multiple Peritoneal Inclusion Cysts in Post Operative Case of Ectopic Pregnancy.

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ABSTRACT

Multiple peritoneal inclusion cysts, also known as peritoneal pseudocysts, multicystic mesothelioma, and benign cystic mesotheliomas, are a type of cyst-like structures that appears in relation to the peritoneal surfaces and results from a non-neoplastic reactive mesothelial proliferation. Peritoneal inclusion cysts are uncommon abdomino-pelvic cysts seen in perimenopausal women. It is often misdiagnosed clinically as anovarian tumour or ectopic pregnancy due to similar presentation and mimicking finding sonography. We describe a perimenopausal woman presenting with pelvic mass. Her clinical finding sonography suggested anovarian tumour; however, biopsy revealed it as peritoneal inclusion cysts with chronic inflammatory changes. We discuss the possible ways to avoid such mistakes.

KEY WORDS: Mucinous cystadenoma of ovaries, perimenopausal women, peritoneal inclusion cysts

I. INTRODUCTION

Peritoneal inclusion cysts, also known as peritoneal pseudocysts, multicystic mesothelioma, and benign cystic mesotheliomas, are a type of cyst-like structures that appears in relation to the peritoneal surfaces and results from a non-neoplastic reactive mesothelial proliferation. Peritoneal inclusion cysts (PICs) are uncommon mesotheliurm-lined abdominopelvic cysts seen in perimenopausal women. It presents as pelvic mass or with pelvic pain and may be misdiagnosed as anovarian tumour.

II. CASE REPORT

A 29-year multiparous woman came to surgery OPD with chief complaint of bilateral flank pain since 10 days associated with nausea and pain in lower abdomen. No any other complaints like burning micturition, weight loss and irregular menses, per vaginal discharge with adequate sleep and appetite and normal bowel bladder activities were there. Patient was operated for ectopic pregnancy before 1 year at Govt. Hospital Jamnagar through Pfannenstiel incision. On per abdomen examination abdomen was soft non tender with a palpable ballotable mass in the lower abdomen with distinct smooth margins. Perspeculum examination showed features of mixed vaginitis. Results of routine blood investigation and CA-125 were found within normal limits. On USG examination an ill defined irregular shaped marginated anechoic lesion more than probe size with lack of limiting wall is noted in pelvic cavity. Bilateral ovaries shows multiple follicles and encaement of them by the lesion is noted. With anterior displacement of uterus suggestive of peritoneal incusion cyst. CECT abdomen was done and it was suggesting large well defined non enhancing multi loculated cystic lesion with imperceptible wall of approximate size of 11*16*18 cm within pelvis with lack of limiting wall. It shows encaement of both ovaries.

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PATIENT UNDERWENT ELECTIVE LAPAROTOMY IN VIEW OF THE LARGE OVARIAN MASS. INTRAOPERATIVE FINDINGS (IMAGE 1A 1B 1C) CONFIRMED PERITONEAL INCUSION CYST WITH HEALTHY OVARIAN. 4 DISCRETE TRANSPARENT THIN-WALLED, SMOOTH-SURFACED, CLEAR FLUID-FILLED AND VARIABLE-SIZED CYSTS (5-12 CM) STUDED UTERO- VESICAL FOLD, BROAD LIGAMENT, PELVIS AND RETROPERITONEAL SPACES. THE LARGEST CYST OF SIZE 10*8 OVAL SHAPED CYST WAS FOUND ADHERED WITH THE RIGHT OVARY AND UPPER BORDER OF THE UTERUS WHICH WERE SEPARATED WITH THE HELP OF BLUNT DISSECTION. OTHER CYST WHICH WERE ADHERED TO THE UTERUS AND LEFT OVARY WERE DISSECTED OUT WITH HELP OF BLUNT DISSECTION. BOWELS APPEAR UNREMARKABLE WITHOUT ANY PATHOLOGY. PATIENT UNDERWENT UNEVENTFUL LAPAROTOMY FOR CYST REMOVAL AND DISCHARGED ON 5TH DAY. HISTOPATHOLOGY (IMAGE 2A 2B) SUGGESTED PERITONEAL INCLUSION CYST WITH CHRONIC INFLAMMATORY PROCESS.

**IMAGE 1A (THE LARGEST CYST)**. **IMAGE 1B()**

**IMAGE 1B()**
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Image 1C (Multiple Small Cysts)

Image 2A (10X Power) Cystic architecture seen with congestion and inflammation. Cystic wall formed by peritoneal tissue.
III. DISCUSSION

USUAL PRESENTATION IS PROGRESSIVE ABDOMINAL OR PELVIC PAIN OR PALPABLE MASS AS PRESENTINOUR PATIENT.RARELY THERE CAN BE BACKACHE, DYSPAREUNIA, CONSTIPATION, TENESMUS, URINARY FREQUENCY OR INCONTINENCE, ANOREXIA, DYSFUNCTIONAL UTERINE BLEEDING, OR INFERTILITY. PULMONARY EMBOLISM AND VENOUS STASIS MAY ALSO OCCUR SECONDARY TO COMPRESSION. RISK FACTORS INCLUDE PREVIOUS INTRA-ABDOMINAL SURGERIES PERFORMED 6 MONTHS TO 20 YEARS EARLIER BY ANY ROUTE, INTRA-ABDOMINAL INFLAMMATION, PELVIC INFLAMMATORY DISEASE, PERITONEAL TUBERCULOSIS, LEIOMYOMA, TUBO-OVARIAN ABSCESS, ETC. OUR PATIENT HAD TUBALIGATION, LEIOMYOMA AND PELVIC INFLAMMATORY DISEASE. PIC MAY BE MISDIAGNOSED AS MUCINOUS CYSTADENOMA OF OVARIAN PEARL. SIMILARLY RAISED CA125 DERIVED FROM COELOMIC EPITHELIUM IN BOTH CONDITIONS. USG FEATURES ARE NON-SPECIFIC, WITH SMOOTH THIN WALLED MULTISEPTATE CYSTS CONTAINING LIQUID OF DIFFERENT ATTENUATION. [2] CT SCAN SIMILARLY GIVE COBWEB APPEARANCE OF LOCULATED FLUID WITH SEPTATIONS WITHIN, CONFORMING TO THE PERITONEAL SPACE WITH IPSILATERAL OVARY WITHIN IT OR IN THE WALL. INTRAOPERATIVE PICTURALLY PRESENTS AS CONFLUENT MASS OR DISCONTINUOUS CYSTS STUDDED TOGETHER. POSTULATED PATHOLOGY FOR PIC INCLUDES INABILITY TO ABSORB PHYSIOLOGICAL SECRETIONS OF ACTIVE OVARIAN TISSUE ORLY TO DISEASED, INFLAMED OR FIBROSED PERITONEUM FORMING CYSTS WITHIN PERITONEAL ADHESIONS. [3] WE MISSED THE DIAGNOSIS OF THIS UNCOMMON ENTITY POSSIBLY BECAUSE OF SIMILAR AGE, SYMPTOMS, SIGNS AND USG FEATURES MIMICKING BENIGN MUCINOUS CYSTADENOMA OF OVARY.

CONSERVATIVE TREATMENT (USE OF GNRH ANALOGS, ORAL CONTRACEPTIVES TO SUPPRESS OVULATION, PAIN MEDICATION) IS THE FIRST LINE OF TREATMENT. IMAGE-GUIDED TRANSVAGINAL FLUID ASPIRATION AND SCEROTHERAPY HAVE BEEN ATTEMPTED WITH PARTIAL SUCCESS.

SURGICAL RESECTION OF ADHESIONS IS NECESSARY ONLY IN SELECTED CASES. AFTER SURGICAL RESECTION, THE RISK OF RECURRENT IS 30-50%. PERITONEAL INCLUSION CYSTS HAVE NO MALIGNANT POTENTIAL DESPITE THE OCCASIONAL OCCURRENCE OF METAPLASIA.

HORMONES INCLUDE ORAL CONTRACEPTIVES, TAMOXIFEN, LEUPROLIDE, ETC. ASPIRATION WITH ORAL CONTRACEPTIVE
COMBINATION GIVES GOOD RESULT. USG/FLUOROSCOPY-GUIDED SCLEROTHERAPY WITH 10% IODINE OR ABSOLUTE ETHANOL REPORTED 90% SUCCESS RATE. THE GOLD STANDARD TREATMENT IS COMPLETE RESECTION LAPAROSCOPICALLY OR BY LAPAROTOMY.

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