

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

Dr. Aniket Ganava (M.S. General Surgery) Dr. Mayuri Bapodra (M.D. Pathology)

Departments of Surgery, and ¹Pathology, M. P. SHAH Government Medical College and Hospital, JAMNAGAR, GUJARAT, India

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 ABDOMINOPELVIC CYSTS SEEN IN PERIMENOPAUSAL WOMEN. IT IS OFTEN MISDIAGNOSED CLINICALLY AS AN OVARIAN TUMOR DUE TO SIMILAR PRESENTATION AND MIMICKING FINDINGS ON RADIOLOGY. WE DESCRIBE A PERIMENOPAUSAL WOMAN PRESENTING WITH PELVIC MASS. HER CLINICAL FINDING ON RADIOLOGY SUGGESTED AN OVARIAN TUMOR; HOWEVER, BIOPSY REVEALED IT AS PERITONEAL INCLUSION CYSTS WITH CHRONIC INFLAMMATORY CHANGES. WE DISCUSS THE POSSIBLE WAYS TO AVOID SUCH MISTAKES.

KEY WORDS: MUCINOUS CYST ADENOMA OF OVARIES, PERIMENOPAUSAL WOMEN, PERITONEAL INCLUSION CYSTS

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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 (PIC) ARE UNCOMMON MESOTHELIUM-LINED ABDOMINOPELVIC CYSTS SEEN IN PERIMENOPAUSAL WOMEN. IT PRESENTS AS PELVIC MASS OR WITH PELVIC PAIN AND MAY BE MISDIAGNOSED AS AN OVARIAN TUMOR.

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. PER SPECULUM EXAMINATION SHOWED FEATURES OF MIXED VAGINITIS. RESULTS OF ROUTINE BLOOD INVESTIGATION AND CA 17.7 & 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 ENCASEMENT OF THEM BY THE LEISON IS NOTED. WITH ANTERIOR DISPLACEMENT OF UTERUS SUGGESTIVE OF PERITONEAL INCLUSION 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 ENCASEMENT 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 INCLUSION CYST WITH HEALTHY OVARIES. 4 DISCRETE TRANSPARENT THIN WALLED, SMOOTH SURFACED, CLEAR FLUID FILLED AND VARIABLY SIZED CYSTS (5-12 CM) STUDDED UTERO-VESICAL FOLD, BROAD LIGAMENT, PELVIS AND RETROPERITONEAL SPACES. THE LARGEST CYST OF SIZE 10*8 CM 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 CYSTS 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.

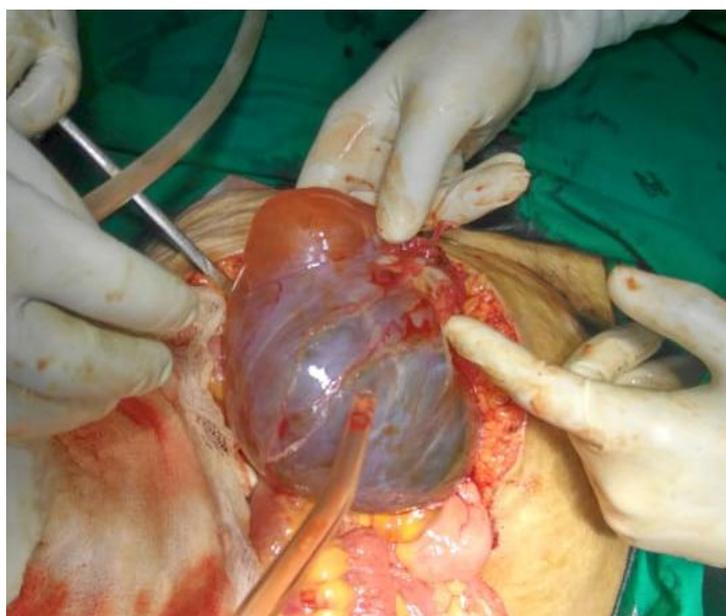


IMAGE 1A (THE LARGEST CYST). IMAGE 1B()

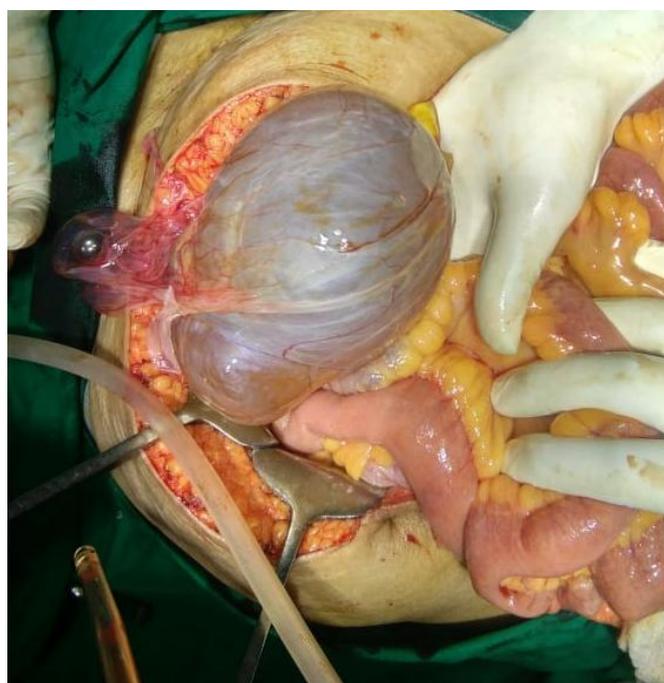


IMAGE 1B()

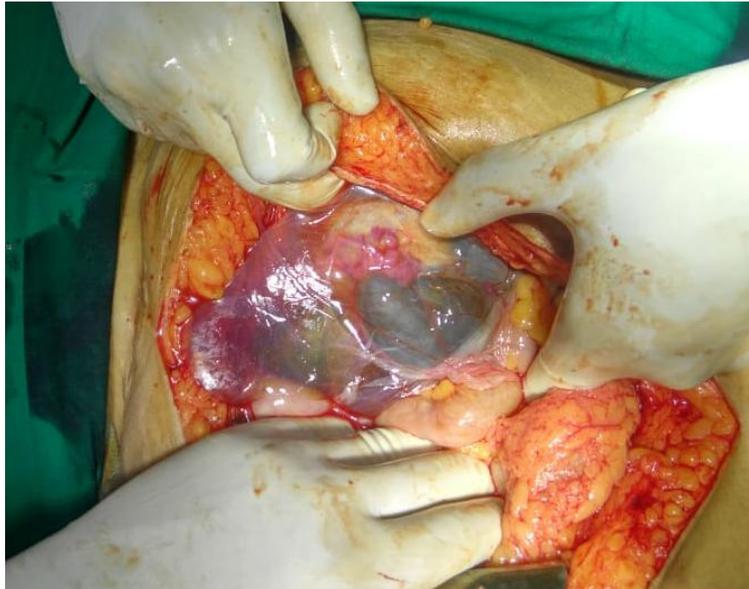


IMAGE 1C(MULTIPLE SMALL CYSTS)

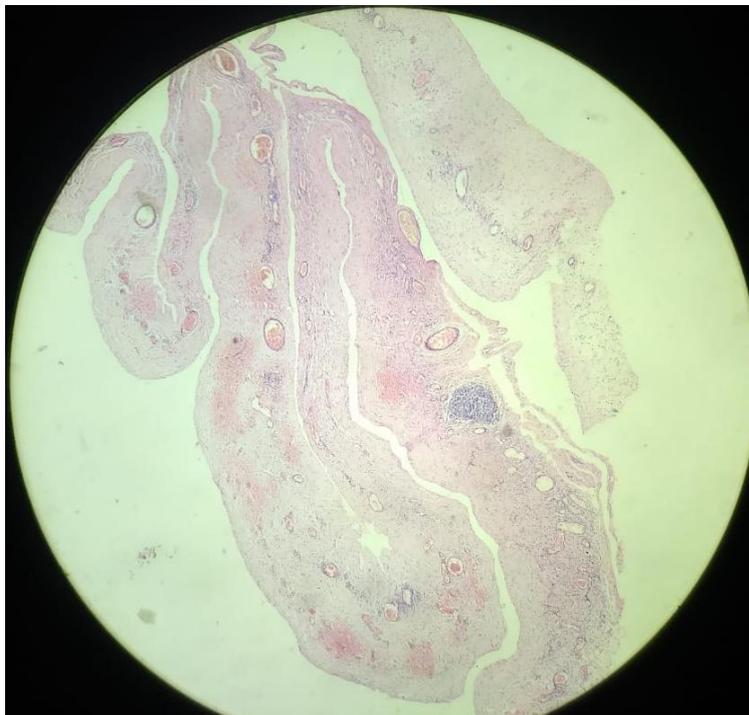


IMAGE 2A (10X POWER)CYSTIC ARCITECTURE SEEN WITH CONGETION AND INFLAMMATION.
CYSTIC WALL FORMED BY PERITONEAL TISSUE.

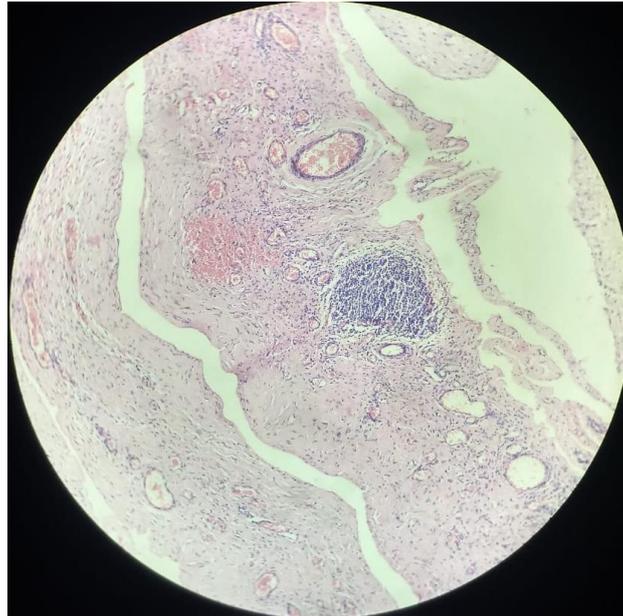


IMAGE 2B(4X POWER)

III. DISCUSSION

USUAL PRESENTATION IS PROGRESSIVE ABDOMINAL OR PELVIC PAIN OR PALPABLE MASS AS PRESENT IN OUR 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 INTRAPERITONEAL SURGERIES PERFORMED 6 MONTHS TO 20 YEARS EARLIER BY ANY ROUTE, INTRAPERITONEAL INFLAMMATION, PELVIC INFLAMMATORY DISEASE, PERITONEAL TUBERCULOSIS, LEIOMYOMA, TUBO-OVARIAN ABSCESS, ETC. OUR PATIENT HAD

TUBAL LIGATION, LEIOMYOMA AND PELVIC INFLAMMATORY DISEASE. PIC MAY BE MISDIAGNOSED AS MUCINOUS CYSTADENOMA OF OVARIES FOR SIMILAR PRESENTATION AND SLIGHTLY 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 PICTURE TYPICALLY PRESENTS AS CONFLUENT MASS OR DISCONTINUOUS CYSTS STUDDED TOGETHER.

POSTULATED PATHOLOGY FOR PIC INCLUDES INABILITY TO ABSORB PHYSIOLOGICAL SECRETIONS OF ACTIVE OVARIES BY 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 SCLEROTHERAPY HAVE BEEN ATTEMPTED WITH PARTIAL SUCCESS.

SURGICAL RESECTION OF ADHESIONS IS NECESSARY ONLY IN SELECTED CASES. AFTER SURGICAL RESECTION, THE RISK OF RECURRENCE 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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