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Images in Medicine

Obstetrics and Gynaecology Section

Undiagnosed Endometriosis: A Rare Case of Frozen Pelvis

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BY-NC-ND

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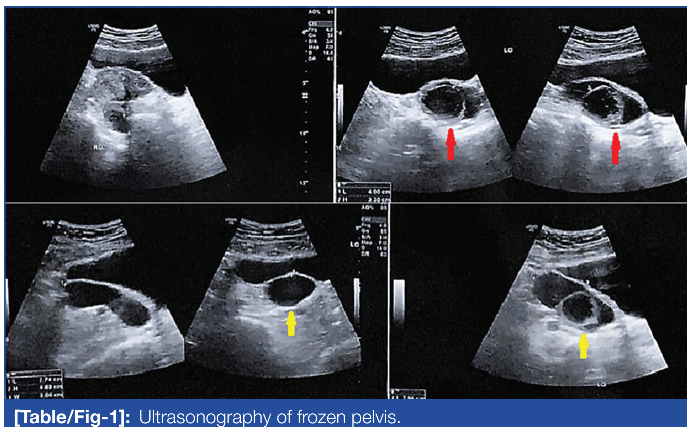
A 40-year-old woman, para two live two, arrived at the emergency room complaining of dysmenorrhoea for three years and postcoital bleeding for four years. She had no previous history of any operation. Her presentation was consistent with acute pain in the abdomen, and she took treatment for that, but it was not relieved. She had no significant family history. Her vital signs, urinalysis, and complete blood count were within normal limits. Her ultrasonography report showed a bilateral ovarian cysts with a 12-week-sized uterus [Table/Fig-1]. The differential diagnoses of frozen pelvis included pelvic inflammatory disease, pelvic adhesion disease, recurrent ovarian cysts, leiomyoma, adenomyosis, and hydrosalpinx.



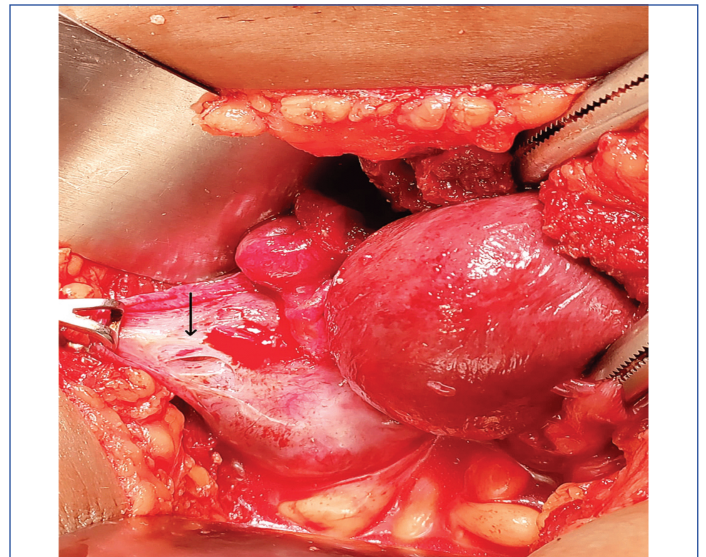
[Table/Fig-1]: Ultrasonography of frozen pelvis.

A laparotomy was performed. Upon examination, the uterus was 12 weeks in size, adhered posteriorly to the rectosigmoid colon, and had a right ovarian cyst measuring 6x5 cm and a left ovarian chocolate cyst measuring 4x3 cm [Table/Fig-2]. The surgeon requested assistance during the surgery and attempted to remove the adhesion, inadvertently rupturing the wall of the left cyst. The cyst was extracted along with its contents. A salpingo-oophorectomy was conducted after aspirating the left ovarian cyst (chocolate in colour).

Further dissection was not possible due to injury to the bowel and rectosigmoid region. A senior consultant confirmed the diagnosis of a frozen pelvis. The uterus, along with both ovaries, was removed and sent for histopathology, after which the abdomen was closed in layers. The uterus weighed 210 g. The patient had an uneventful postoperative recovery. During follow-up, she received a monthly subcutaneous injection of goserelin 3.5 g. She reported no further complaints of abdominal pain. The histopathology report revealed endometriosis as the cause of the frozen pelvis.

DISCUSSION

Endometriosis occurs in 10-15% of all reproductive-age females and 70% of women with persistent pelvic pain [1]. Endometriosis is estimated to affect 176 million women worldwide, with 26



[Table/Fig-2]: Intraoperative frozen pelvis

million cases documented in India [2]. There are three types of endometriosis: Peritoneal, ovarian, and Deep Infiltrating Endometriosis (DIE). DIE is a term for the infiltration of endometrial tissue deposits about five millimeters into surrounding tissue [3]. Endometriosis can be detected by laparoscopy in between 34% and 48% of Indian women, according to several studies [1,2]. Women with endometriosis have complained of difficulty in conceiving, dysmenorrhoea, dyspareunia, dysuria, dyschezia, and abnormal or dysfunctional uterine bleeding. These patients may be asymptomatic or have non specific symptoms such as nausea, vomiting, dyspareunia, haematochezia, abdominal pain, abdominal distension, and abnormal bowel habits (diarrhoea, constipation) [3].

Diagnosing a frozen pelvis due to endometriosis requires a thorough evaluation. Initial Imaging like transvaginal ultrasound, Magnetic Resonance Imaging (MRI), or Computed Tomography (CT) scans may help visualise adhesions and their impact on pelvic structures. Laparoscopy is the gold standard for diagnosing endometriosis and assessing the extent of pelvic adhesions [4]. Dienogest is equally effective as Gonadotropin-releasing Hormone (GnRH) agonists at a dose of 2 mg/day but has fewer side effects (Evidence Level A) [5]. GnRH agonist is one of the choices for treating pain brought on by endometriosis. Leuprolide and goserelin are the most frequently utilised GnRH agonists [6]. To rule out rare cases of cancer, it is recommended that doctors should submit histopathology for ovarian endometrioma or DIE [7,8]. To minimise adhesions and related difficulties in endometriosis patients, adhesiolysis with either oxidised regenerated cellulose absorbable barrier or adhesion barrier gel could be considered in surgical treatments for endometriosis

[9]. Endometriosis recurrence can be reduced or delayed by using progestins, GnRH analogs, or Oral Contraceptive Pills (OCP) after surgery for at least six months [10,11]. Surgery can be abandoned due to a lack of skilled surgeons. Surgery should be executed at a location with easy access to these facilities [12]. Neuropathic pain, which may be confused with endometriosis pain, can arise from nerves growing within the adhesions of highly adherent organs. To relieve the previously stated adhesions and symptoms, a frozen pelvis necessitates immediate surgery [13].

The endometriosis-related frozen pelvis is a severe and challenging expression of this common gynecological disease. For those impacted, early detection, precise diagnosis, and a thorough treatment plan are crucial for symptom relief, enhancing quality of life, and addressing problems with conception. Before selecting the aggressive surgical path, patients must be informed of the short- and long-term risks associated with such significant procedures. Further research and clinical advancements are essential to refining treatment approaches.

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