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Original Research Paper

Pathology

TUBAL ENDOMETRIOSIS PRESENTING AS A MASS IN LEFT ILIAC FOSSA - A RARE CASE REPORT

Dr. Nishat Ahmad Junior Resident, Department of Pathology, Rajendra Institute of Medical Sciences, Ranchi

Dr. M. A. Ansari* Associate Professor, Department of Pathology, Rajendra Institute of Medical Sciences, Ranchi *Corresponding Author

Dr. R. K. Srivastava Professor and Head, Department of Pathology, Rajendra Institute of Medical Sciences, Ranchi

ABSTRACT Endometriosis is common cause of infertility. We report a case of 28 year old female presenting with left iliac fossa lump diagnosed as endometriosis of fallopian tube on histopathological examination.

KEYWORDS : Endometriosis, Fallopian tube, Dysmenorrhoea, Infertility

INTRODUCTION

Endometriosis is defined as the presence of normal endometrial mucosa (glands and stroma) abnormally implanted in locations other than the uterine cavity[1]. This tissue, possessing the same steroid receptors as normal endometrium, is capable of responding to the normal cyclic hormonal milieu. These ectopic foci respond to cyclical hormonal fluctuations in much the same way as intrauterine endometrium, with proliferation, secretory activity, and cyclic sloughing of menstrual material. Microscopic internal bleeding, with the subsequent inflammatory response, neovascularisation, and fibrosis, is responsible for the clinical consequences of the disease. Ectopic endometrial tissues are most commonly located in the dependent portions of the female pelvis (e.g., posterior and anterior cul-de-sac, uterosacral ligaments, tubes, ovaries), but any organ system is potentially at risk and may manifest as severe dysmenorrhoea, chronic pelvic pain or infertility. The cyclic release of cytokines and prostaglandins lead to an altered inflammatory response characterized by neovascularisation and fibrosis[2]. The associated pain, adhesion and anatomic distortion are the clinical consequences of this disease.[3]

CASE REPORT

We present a case of 28 year female who presented in Obstetrics and Gynaecology outpatient department with complaints of pain along with lump in Left Iliac Fossa for the last 5 months. There was no history of fever or any menstrual irregularities. She had three children aged 10 years, 5 years and 2 years. She had undergone appendicectomy 7 years back and bilateral tubal ligation 1 year back. On Examination a hard, immobile intra-abdominal lump of about 6x5 cm was found in Left iliac fossa which was non tender with smooth surface and regular margin.

An ultra-sonological examination of whole abdomen was performed which showed a large heterogenous mass with multiple internal tiny calcifications in left adnexa that extended into the hypogastric region.

She underwent total abdominal hysterectomy with bilateral salpingo-oopherectomy. Intra operatively a highly vascular left broad ligament tumour of about 10x12 cm with multiple solid areas was found that extended to lateral pelvic wall and was adherent to adjacent structures.

HISTOPATHOLOGICAL EXAMINATION

Grossly, the specimen consisted of uterus with cervix and bilateral adnexa measuring 13x9x3.5 cm. Attached to left Fallopian Tube stump was a mass about 8x6 cm. Multiple sections were taken from the specimen and the mass attached to left Fallopian Tube. Microscopic examination confirmed the mass as Fallopian Tube Endometriosis [Fig 1 & 2]. Uterus and cervix were unremarkable.

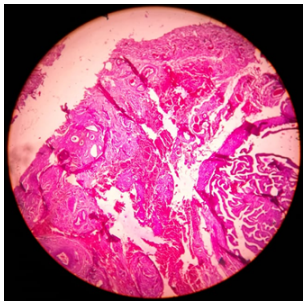

Fig 1: Endometrial glands and stroma along with areas of normal fallopian tube

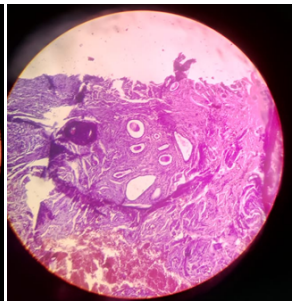

Fig 2: Endometrial glands and stroma

DISCUSSION

5%-10% of all females of reproductive age group are affected by endometriosis.[4] Endometriosis is a cause of infertility in about 30%-50% of women.[5] In a study[6], endometriosis of fallopian tubes was found in approximately 10% cases of fallopian tube and broad ligament mass. In fallopian tube, endometriosis commonly involves the distal end. Histologically, endometrial tissues can be found within the mucosa of intramural and isthmic segments of the fallopian tube. Endometriosis can also occur in the lumen of Fallopian tube (focal replacement of tubal epithelium by uterine mucosa) or myosalpinx or adjoining structures. Rarely, tubal endometriosis may produce a mass simulating a tumor (polypoid endometriosis). Post-salpingectomy endometriosis can involve the tip of the proximal stump of the fallopian tube years after tubal ligation.[7]

Several mechanisms have been proposed to explain endometriosis-related tubal pathology. The most popular hypothesis involves retrograde menstruation into the peritoneal cavity.[8] Endometriosis leads to an increased volume of peritoneal fluid with a high concentration of activated macrophages, prostaglandins, IL-1, TNF, and proteases. These alterations have adverse effects on the function of the oocyte, sperm, embryo, or fallopian tube. The retrograde menstruation of non-sterile menstrual blood into the peritoneal cavity also provides a route for microbial transport. This promotes the survival and persistence of these microorganisms in the upper genital tract, where they replicate causing tubal damage. The microflora also stimulates chemotaxis of macrophages and the subsequent secretion of secondary inflammatory mediators leading to microscopic changes in fallopian tube causing infertility and other structural changes. Various other mechanisms have also been proposed which includes (1) A macromolecular ovum capture inhibitor[9], causing formation of a membrane over the fimbrial cilia, detected in the peritoneal fluid from women with endometriosis. (2) Adhesions and scar formation associated with pelvic inflammation

causing subsequent impaired ovarian oocyte release or capture as well as impairment of tubal transport due to physical obstruction. (3) Recently, endometriosis has been proposed to be an autoimmune disease because of the presence of a variety of auto-antibodies against endometrium.[10] (4) Other theories are altered hormonal and cell-mediated function due to increased IgG and IgA antibodies and lymphocytes in the endometrium of women with endometriosis leading to alteration of endometrial receptivity. (5) associated endocrine and ovulatory disorders (e.g., longer follicular phase with possibly lower serum estradiol levels and lower LH-dependent progesterone secretion during luteal phase of cycle.

The growth and inflammatory behaviour of an ectopic endometrial implant is modulated by a complex network of humoral and cellular immunity factors.

Clinical presentation of endometriosis is variable. Approximately one third of women remain asymptomatic without any significant clinical manifestation. Signs and symptoms typically reflect the area of involvement.

Symptoms (with rate of occurrence) are Dysmenorrhoea (60-80%), Chronic pelvic pain (40-50%), Infertility (30-50%), Deep dyspareunia (40-50%), Irregular flow and/or premenstrual spotting (10-20%), Tenesmus / hematochezia/ diarrhea (1-2%), Dysuria, micro/ macroscopic hematuria (1-2%)[11,12,13,14]

This case is unique as the patient did not have these typical symptoms but she presented with a lump in left iliac fossa.

CONCLUSION

Dysmenorrhoea, chronic pelvic pain, or infertility is the usual manifestations of endometriosis. But it may also present as a lump in left iliac fossa.

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