

Original article:

A Retrospective Clinicopathological Evaluation of Ovarian Endometriotic Cysts at a Tertiary Care Hospital

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Acceptance Date: 16 Feb 2013

Abstract:

Background: Endometriosis is an important gynecologic disorder with multifactorial causes, primarily affecting women during their reproductive years. The present study was a clinicopathological study to assess ovarian endometriotic cysts.

Materials & Methods: The case records of 50 histopathologically confirmed cases of EM over the 1 year were retrieved. Details about the demographic profile, presenting complaints, histopathological features were recorded and analyzed.

Results: The majority of the patients were in the age group of 40 to 50 years (40%), followed by 31 to 40 years (34%), and 18 to 30 years (26%). The presence of chronic pelvic pain was the most common complaint, which was seen in 50% of cases, followed by dysmenorrhea (30%) and menorrhagia (12%). On analysis of the various histopathological features, the lining epithelium was identified in about 68% of cases. Fibrosis and hemosiderin laden macrophages were present in 70% and 80% of cases respectively.

Conclusion: The study concluded that the presence of chronic pelvic pain was the most common clinical feature of ovarian endometriotic cysts patient. Recognition of these cysts on histopathological examination can be challenging at times when endometrial stroma is scant.

Keywords: Clinical Feature, Ovarian Endometriotic Cysts, Histopathological Examination.

INTRODUCTION

Endometriosis is a common gynecological disease in women of reproductive age.¹ Endometriosis (EM) is the presence of endometrial tissue comprising glands and stroma located outside the uterus.² Endometriosis is a pathologically benign disease that is classified into ovarian endometriosis, superficial peritoneal disease, or deep infiltrating endometriosis. Endometriosis most commonly affects the ovaries and is associated with pelvic pain, infertility, or malignant transformation.¹ The exact prevalence of EM is difficult to estimate, as many cases go underdiagnosed, and the diagnosis requires invasive testing. Estimates ranges up to 10% among general population, 0.5 to 5% among fertile women, and 25 to 40% in infertile women.³ The most common symptoms of EM are chronic pelvic pain, dysmenorrhea, dyspareunia, and infertility.⁴ Areas commonly affected by endometriosis include the surface of the ovaries and the pelvic peritoneum and can result in pelvic inflammation, adhesions, chronic pain and infertility.⁵ The present study was a clinicopathological study to assess ovarian endometriotic cysts.

MATERIALS AND METHODS

The present study was a clinicopathological study to assess ovarian endometriotic cysts conducted at Department of Pathology, Meenakshi Medical College Hospital and Research Institute, Kanchipuram, Tamil Nadu, India. The case records of 50 histopathologically confirmed cases of EM over the 1 year were retrieved. Details about the demographic profile, presenting complaints, histopathological features were recorded and analyzed. Simple descriptive statistics were used and data represented in the form of tables, proportions by using pie diagrams and bar charts wherever necessary.

RESULTS

The present study included 50 females with EM. The majority of the patients were in the age group of 40 to 50 years (40%), followed by 31 to 40 years (34%), and 18 to 30 years (26%). The presence of chronic pelvic pain was the most common complaint, which was seen in 50% of cases, followed by dysmenorrhea (30%) and menorrhagia (12%). On analysis of the various histopathological features, the lining epithelium was identified in about 68% of cases. Fibrosis and hemosiderin laden macrophages were present in 70% and 80% of cases respectively.

Table1: Distribution of data according to age group

Age group	N (%)
18-30 years	13(26%)
31-40 years	17(34%)
41-50 years	20(40%)

Table 2: Clinical features

Clinical features	N (%)
Chronic pelvic pain	25(50%)
Dysmenorrhea	15(30%)
Dyspareunia	1(2%)
Menorrhagia	6(12%)
Infertility	4(8%)
Nodule/wound gaping	4(8%)
Mass per abdomen	3(6%)
Polymenorrhea	2(4%)
Irregular cycles	2(4%)
dysfunctional uterine bleeding	3(6%)
Cough and breathlessness	1(2%)

Table 3: Histopathological features of endometriotic cysts

Histopathological features	N (%)
Lining Epithelium	34(68%)
Present with atypia	2(4%)
Oncocytic change	2(4%)
Fibrosis	35(70%)
Adjacent endometrial glands	36(52%)
Endometrial stroma	30(60%)
Hemosiderin laden macrophages	40(80%)
Ceroid laden macrophages	3(6%)
Inflammatory Component	
Lymphocytes	29(58%)
Plasma cells	21(42%)
Eosinophils	1(2%)
Neutrophils	2(4%)
Histiocytes	47(94%)

DISCUSSION

Endometriosis is a hormone dependent disease and estrogen stimulates its growth.⁶ Today, superficial endometriosis is thought to be a physiological and intermittent condition in women during their reproductive years, whereas evolving disease characterized as deep infiltrative endometriosis and endometrial ovarian cysts is considered to be the true disease.⁷

The majority of the patients were in the age group of 40 to 50 years (40%), followed by 31 to 40 years (34%), and 18 to 30 years (26%). The presence of chronic pelvic pain was the most common complaint, which was seen in 50% of cases, followed by dysmenorrhea (30%) and menorrhagia (12%). On analysis of the various histopathological features, the lining epithelium was identified in about 68% of cases. Fibrosis and hemosiderin laden macrophages were present in 70% and 80% of cases respectively.

The mean age of EM in a study done by Amaral et al, was 29.2 ± 5.6 .⁸

There is a high risk of premature menopause in patients with EM, which is associated with infertility. These women are treated with hormone replacement therapy (HRT). The use of HRT raises concerns like recurrence of pain, need for surgery, and 1% malignant transformation of residual EM.⁶

Adolescent EM can occur in association with obstructive Mullerian duct anomalies, with an estimated incidence being 11 to 40%.⁹ The lesions are located in peritoneum and ovaries, with peritoneal implants categorized into early-active (red, glandular), advanced (black, puckered), and healed (white, fibrotic).¹⁰

CONCLUSION

The study concluded that the presence of chronic pelvic pain was the most common clinical feature of ovarian endometriotic cysts patients. Recognition of these cysts on histopathological examination can be challenging at times when endometrial stroma is scant. Therefore, careful histological assessment and related clinical information are critical for the correct interpretation of these rare entities.

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