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RESEARCH

Characteristics of Endometriosis and Adenomiosis Patients In Dr. M. Djamil Hospital Padang in The Period of January 2017 - October 2018

Arde Hidayat¹, Dedy Hendry²

Affiliations: 1. Resident of Obstetrics and Gynecology, Faculty of Medicine, Andalas University, Dr. M. Djamil Central General Hospital Padang; 2. Sub Division of Reproductive Endocrinology, Obstetrics and Gynecology Department, Faculty of Medicine, Andalas University, Dr. M. Djamil Central General Hospital Padang

Correspondence: Arde Hidayat, email: rieck.arde@gmail.com, Hp: 085274135085

Abstract

Background: Endometriosis is a benign gynecological disorder characterized by the presence of endometrial glands and stroma outside the normal location. Endometriosis is a chronic disorder which is a major cause of infertility, dysmenorrhea, dyspareunia and chronic pelvic pain with varying degrees of pain. Management of endometriosis can be in the form of medical therapy and/or surgical therapy. Surgical therapy can be conservative and definitive.

Objective: This study aims to obtain the characteristics of patients with endometriosis and adenomiosis who are operated at Dr. M. Djamil Padang for the period of January 2017 - October 2018.

Method: This was descriptive retrospective study, using medical records data of endometriosis patient at Dr. RSUP M. Djamil Padang.

Result: The results of the study obtained 160 cases of endometriosis patients who were operated during that period but only 154 patients had complete data in the medical record. Endometriosis cases were common among age of 36-45 years old (42.2%), married (87.7%), nullipara (61.7%), ovarian endometrioma (44.8%),laparotomy method (54.6%), type of surgery was cystectomy (44.8%), and pain reduced post operation (62.7%).

Conclusion: Most frequent characteristics of endometriosis patient were operated in the 36-45 year age group, married, nullipara, ovarian endometrioma, laparotomy method, type of surgery was cystectomy and pain reduced post operation

Keywords: endometriosis, adenomiosis, dysmenorrhea

INTRODUCTION

Endometriosis is a benign gynecological disorder characterized by the presence of endometrial glands and stroma outside the normal location^{1,2,3,4}. Endometrial tissue can be found anywhere in the body, especially in the ovaries and peri-tone pelvis^{1,5,6}. Endometriosis is a chronic disorder which is a major cause of infertility, dysmenorrhoea, dyspareunia and chronic pelvic pain with varying degrees of pain^{1,6,7}. Endometrial tissue in the myometrium is called adenomyosis¹. Other locations are in the posterior uterus and rotundum ligament, uterosacral ligament, fallopian tube, colon, and appendix, it can also be found in the farthest



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locations, namely the breast, lung, and brain⁵. Endometriosis is a disease that is dependent on estrogen, recurrent, progressive, and requires long-term therapy⁷.

The exact prevalence of endometriosis is unknown, endometriosis is predominantly found at reproductive age, but also found in adolescents and postmenopausal who receive hormonal therapy³. Surgery is an appropriate method for establishing a diagnosis of endometriosis, and generally this method cannot be performed on women without symptoms or without clear indications and often asymptomatic endometriosis^{1,2,8}. The main diagnostic method is visual inspection of the pelvis by laparoscopy with or without biopsy^{1,3}. The incidence of endometriosis through this method is 1.6 cases per 1000 women with an age range of 15- 49 years^{1,2}. In women without symptoms the prevalence of endometriosis ranges from 6-11 percent, depending on the research population¹. From several studies it is found that the prevalence of endometriosis is 20-50 percent in infertility women, 30-50 percent of patients with endometriosis experience infertility, 40-50 percent with pelvic pain and reported 2/3 patients who undergo laparoscopy found evidence of endometriosis^{1,9}. The average age at diagnosis of endometriosis ranges from 25-35 years⁸.

The pathogenesis of endometriosis is not known for certain^{1,8}. Several theories have explained the causes of endometriosis as follows retrogate menstruation through the fallopian tube, stem cell theory, lymphatic embolism, selomic metaplastic, immunology, genetic presdiposition, and the theory of lymphatic and vascular embolism^{1,3,8,9}.

The diagnosis of endometriosis can be established from clinical symptoms and investigations. Endometriosis should be suspected in patients with infertility, dysmenorrhoea, dysperunia, or chronic pelvic pain. And endometriosis can also be asymptomatic and can be found during pelvic surgery^{2,3,8,9}. Laparoscopy with histopathological examination is the gold standard for the diagnosis of endometriosis^{3,8,9}. Characteristic findings from laparoscopy are typical lesions resembling powder burn or gunshot on the surface of the serous peritoneum and infection carefully of both ovaries3. Management of endometriosis can be in the form of medical therapy, operative and a combination of medical and operative therapy^{1,2,3,5,8,9}. Endometriosis therapy is individualized depending on the symptoms and reproductive goals^{1,9}. The therapeutic goals of women with endometriosis include control, pain, hormonal suppression from active endometriosis, and/ or surgical removal or destruction of endometriotic lesions⁹. This medical therapy aims to reduce complaints such as pain¹. Medica-mentosa therapy cannot improve fertility and is not an effective therapy for overcoming endometrioma and pelvic adhesion⁸.

Surgical therapy is divided into conservative and definitive. Conservative surgery is the maintenance of the reproductive organs and repair of normal pelvic anatomy and removing all macroscopic endometriosis or endometrioma lesions and performing adhesion lysis. Definitive surgery involves removing the uterus and cervix along with visible lesions while preserving or removing one or both ovaries¹. Definitive surgery can be performed in the form



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of total hysterectomy, bilateral salpingo-oophorectomy, and removal of all found endometriosis nests¹⁰. Surgical therapy is more recommended than medical therapy in infertile women with endometriosis⁸.

After treated with conservative surgical treatment, the cure rate is 10-20% per year. Endometriosis can recur unless a hysterectomy and bilateral oophorectomy have been performed. After the conservative surgery, a reported recurrence rates vary widely. The number of cases occurred averaged more than 10% in three years and 35% in five years¹¹. Today, surgical therapy can be carried out through a laparoscopic approach that is minimally invasive, resulting in better visualization, minimal tissue trauma and rapid postoperative recovery^{4,8}.

METHOD

The type of this research is descriptive retrospective, by collecting data of the patients' medical records experiencing endometriosis and adenomyosis. The study was conducted in January 2017-October 2018 in the Department of Obstetrics and Gynecology of RSUP D. M. Djamil Padang. The study sample was all patients diagnosed with endometriosis and adenomyosis which have been treated with operative measures in the period January 2017-October 2018. Research variables were age, marital status, parity, major complaints, diagnosis, method of operative approach, type of operative action, complaints of pain after action and fertility status after action.

RESULTS

Based on research conducted in the Obstetrics and Gynecology Section of RSUP Dr. M. Djamil Padang in the period January 2017-October 2018 found 160 cases of endometriosis but only 154 cases met the study criteria.

The highest frequency of sufferers came from the age group of 36-45 years with 64 cases (42.2%); age group of 26-35 years as many as 54 cases (35.1%); the age group of 20-25 years were 18 cases (11.7%) and at least the age group of 46-55 years were 17 cases (11.0%) (Table 1).

Table 1. Distribution of endometriosis and adenomyosis patients by age

Age	n	%
< 20 – 25 years	18	11.7
26 – 35 years	54	35.1
36 – 45 years	65	42.2
46 – 55 years	17	11
Total	154	100



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Distribution of sufferers based on marital status were 135 people (87.7%) with marital status, and 19 people (12.3%) with unmarried status (Table 2).

The highest number of parity of endometriosis patients in parity 0 (nulliparous) were 95 cases (61.7%), followed by parity 2 (14.3%), parity1 (primipara) (12.3%), parity 3 (10.4%), and parity 4 (1.3%) (Table 3).

Table 2. Distribution of endometriosis and adenomyosis patients by marital status

Marital status	n	%
Married	135	87.7
Unmarried	19	12.3
Total	154	100

Table 3. Distribution of endometriosis and adenomyosis patients based on parity

Parity	n	%
0	95	61.7
1	19	12,3
2	22	12,3 14,3 10.4
3	16	10.4
4	2	1.3
Total	154	100

Table 4. Distribution of endometriosis and adenomyosis patients based on the main complaint

	, , ,	<u> </u>
Age	n	%
Menstrual pain	40	26.0%
Pelvic pain	19	12.3%
Bleeding	24	15.6%
Infertility	71	46.1%
Total	154	100%

The most common complaint of patients with endometriosis who were operated on was infertility as many as 71 people (46%) followed by menstrual pain as many as 40 people (26.0%) (Table 4). Distribution of patients based on diagnosis was the most with diagnosis of endometriosis cysts/ bilateral as many as 69 people (44.8%) followed by adenomyosis as many as 49 people (31.8%), adenomyosis + endometriosis cyst 17 people (11.0%), adenomyosis + bilateral endometriosis cyst 15 people (9.7%) and others 4 people (2.7%) (Table 5).

Table 5. Distribution of endometriosis and adenomyosis patients by diagnosis

	, , , ,	
Diagnosis	69	44.8
Cystendometriosis/ bilateral	49	31.8
Adenomyosis	17	11.0
Adenomyosis + cyst endometriosis	15	9.7
Adenomyosis + cyst bilateral endometriosis	4	27
Total	154	100



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The distribution of endometriosis patients based on the most surgical approach method with the Laparatomi method were 84 people (54.6%) and the Laparoscopy method were 70 people (45.4%) (Table 6)

Table 6. Distribution of endometriosis and adenomyosis patients by surgery method

Diagnosis	Laparoscopy	Laparotomy	n
Endometriosis/ bilateral cysts	65	4	69
Adenomyosis	2	47	49
Adenomyosis + cysr endometriosis	0	17	17
Adenomyosis + bilateral endometriosis cyst	1	14	15
Others	2	2	4
Endometriosis tuba	1	0	1
Endometriosis grade I- II	0	2	2
Endometriosis cervix	1	0	1
Total (%)	70 (45,5)	84 (54,6)	154 (100)

The highest distribution of endometriosis patients by type of surgery was cystectomy/ bilateral as many as 69 people (44.8%), followed by hysterectomy of 26 people (16.9%), OSADA 25 people (16.3%). (Table 7)

Table 7. Distribution of endometriosis and adenomyosis patients by type of surgery

Type of Surgery	n	%
Kistektomi/bilateral	69	44.8
OSADA	25	16.3
OSADA + kistektomi	18	11.7
Shalpingektomi/ablasi	3	1.94
Histerektomi	26	16.5
HTSOB	7	4.5
Histerektomi + kistetomi	6	3.9
Total	154	100

Distribution of endometriosis and adenomyosis patients based on postoperative pain complaints with a total of 59 patients who complained of pain.

Table 8. Distribution of endometriosis and adenomyosis patients based on postoperative pain complaints

Complaint of paining	n	%
Missing (pain scale 0)	17	28.8
Improvement (decreased pain scale)	37	62.7
Decrease (increased pain scale)	5	8.5
Total	59	100



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Endometriosis and adenomyosis patients in RSUP dr. M. Djamil Padang with infertility performed before surgery, as many as 37 people (62.7%) with pain relief, 17 people with pain disappeared (Table 8).

Table 9. Fertility status of endometriosis patients and postoperative adenomyosis

Fertility status	N	%
Pregnant	0	0
Non pregnant	69	100
Total	69	100

DISCUSSION

This research was done using medical data records obtained 154 sufferers endometriosis and adenomyosis which have been carried out at RSUP Dr. M. Djamil Padang. The age characteristics of patients were found in mostly 36-45 years of age group (42.2%). Research by Tissot et al. showed the age range of endometriosis patients is 15-49 years¹², and other studies have shown that the average age of someone diagnosed with endometriosis is 25-35 years¹³. This is because endometriosis is a gynecological disease that often occurs in women of childbearing age (15-49 years) and is associated with the hormone estrogen. The average age of a person diagnosed with endometriosis is 25-35 years.^{1,8}

Most endometriosis and adenomyosis sufferers with a the status of married were 135 people (87.7%) and as many as 95 people (61.7%) did not have children (nulliparous). As many as 30-40% of infertile women suffered from endometriosis.⁵

Research by Parazzini et al showed that most endometriosis patients have an early age of menarche, a long menstrual cycle, thin body, alcohol intake, oral contraception, and environmental factors14. Research by Tissot et al showed endometriosis is more common in nulliparous women¹². Explanation of the relationship between endometriosis and infertility that is related to the occurrence of fallopian adhesions that can interfere with the process of oocyte collection and transportation by the fallopian tubes.¹.

Based on the diagnosis of patients with endometriosis and adenomyosis in the obstetrics and gynecology department of RSUP Dr. M Djamil padang as many as 69 people (44.8%) with endometriosis cysts. Endometriosis cysts are ovarian cysts that are ectopic endometriosis tissue. These cysts contain endometrial tissue with long menstrual blood so they are brown-colored that they are known as brown cysts⁹.

The method of surgery performed in the obstetrics and gynecology department of RSUP Dr. M Djamil Padang was laparotomy as many as 120 people (77.9%) and laparoscopy as many as 34 people (22.1%), while the most type of operative action was cystectomy as many as 38 people (24.7%). The goal of operative therapy in endometriosis patients is to restore normal anatomical relations, to remove or destroy all visible abnormalities as much as possible,



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prevent and delay recurrence. Operatives can reduce pain complaints and increase fertility^{1,8} ⁹. Operative action can be done through a laparotomy and laparoscopic approach. Laparoscopic treatment is a minimally invasive approach, with better visualization, minimal tissue trauma, and rapid postoperative recovery. The results of laparoscopic surgery are the same even better than laparotomy^{4,8}. Laparotomy should be performed in patients with advanced endometriosis who cannot undergo laparoscopic procedures and in women who do not maintain fertility⁸.

Research conducted by Jin et al showed that laparoscopic endometriosis surgery increases pregnancy rates by 1.44 times. Most infertile women who successfully become pregnant are those who are diagnosed with stage I and II¹⁵ endometriosis. Research by Al Jefout suggested that women with chronic pelvic pain who do not recover with conventional therapy should perform laparoscopy to confirm or rule out endometriosis and to treat endometriosis surgically, prevent future complications, reduce pain, and protect fertility¹³.

Complaints of pain in patients with endometriosis and postoperative adenomyosis have given satisfactory results where as many as 37 people (62.7%) of 59 patients with complaint of pain. While the fertility status of endometriosis and adenomyosis patients after surgery did not show good results, most patients have been given explanation for joining the pregnant program but not yet joining the pregnancy program due to cost issues.

CONCLUSION

Based on the results of this study it can be concluded that the characteristics of patients with endometriosis and adenomyosis which are acted on in the obstetrics and gynecology department of RSUP Dr. M. Djamil Padang is mostly in the 36-45 years age group, in status of married, and most is in nulliparous women. In addition, the diagnosis of patients being treated is endometriosis/ bilateral cysts, the surgical method used is laparotoimi and the type of operation is cystectomy. Complaints of pain after surgery in most patients have improved and the fertility status of patients with endometriosis and adenomyosis after surgery has not shown good results.

SUGGESTION

It is recommended that further research be done by adding research variables such as the degree of endometriosis and anatomical pathology. It is recommended to improve the writing and management of medical records at RSUP Dr. M. Djamil Padang thus it can support further research that is more complete and accurate.



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