

=ABSTRACT=

Study on endometriosis in an adolescent population

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**Purpose :** To review diagnostic procedure, clinical stage, age distribution, treatment of endometriosis in adolescents.

**Material and Method :** We retrospectively reviewed medical records of 39 adolescent girls(11-21) admitted to Yonsei University College of Medicine between 1990 and 1999. We identified 39 patients who underwent laparotomy or laparoscopy and was diagnosed as having endometriosis. Endometriosis was classified according to the Revised American Fertility Society Classification(AFS). The chief symptoms leading to diagnosis, clinical stage, age distribution, and treatment modality were reviewed.

**Results :** Average age of menarche was 14.2, and the interval after the menarche was 5.9 years. The chief symptoms leading to diagnosis were chronic pelvic pain(27%), acute pelvic pain(21%), palpable pelvic mass(21%), dysmenorrhea(18%). Laparoscopy was performed in 20 patients(51%). The majority of the patients(44%) presented with stage II, 4(10%) with stage I, 11(28%) with stage , and 7(18%) with stage IV. GnRH agonists(64.1%), expectant managements(25.7%), OCPs(5.1%) and danazol(5.1%) were used after surgery.

**Conclusion :** Adolescents with chronic pelvic pain have a high rate of endometriosis and should be promptly referred to a gynecologist to diagnose the etiological lesion of pelvic pain and initiate appropriate therapy.

**Key Words :** Endometriosis, adolescence

가  
가 , ,  
, 가  
95%  
가  
가 (prevalence)  
. Meigs  
가 6% , 가  
5-15%  
가 1-5 가 6

45%,  
70%  
7.8  
가  
가  
가  
10  
가  
1990 1 1999 12  
14 21  
39  
1985 AFS  
(Revised American Fertility Society Classification of Endometriosis)  
9  
39 14 21  
20 가 29 (74.3%)  
20.1 (Table 1).  
14.2  
5.9 (Table 2).  
가 4 (10%),

Table 1. Age distribution in adolescent girls with endometriosis (n=39)

Age(year)	14< 18	18< 19	19< 20	20< 21
No.of patients(%)	5 (12.9)	5 (12.9)	10(25.7)	19(48.6)

가 28 (45%),  
가 8 (21%) (Table 3).  
19 (49%)  
20 (51%)  
, , endocoagulation, electrocoagulation,  
4 (10%) 1 , 17  
(44%)가 2 , 11 (28%)가 3 7 (18%)  
가 4 2  
가 3 4  
가 가  
(Table 4).  
가 10 (25.7%),  
가 29 (74.3%)  
2 (5.1%), 2 (5.1%),  
(gonadotropin-releasing hormone agonists;  
GnRHa) 가 25 (64.1%) GnRHa가  
가 (Table 5). 가

Table 2. Age distribution at date of menarche, operation (n=39)

	Mean age (yr)	Range (yr)
Menarche	14.2	12-15
Operation	20.1	14-21

Table 3. Symptoms leading to diagnosis of endometriosis in adolescents (n=39)

Symptoms	No. of patients (%)
Incidental finding	4 (10%)
Dysmenorrhea	7 (18%)
Chronic pelvic pain	11 (27%)
Acute pelvic pain	8 (21%)
Palpable pelvic mass	8 (21%)
Infertility	1 (3%)

Table 4. Stage distribution in adolescent girls with endometriosis (n=39)

Stage	No. of patients (%)
I	4 (10%)
II	17 (44%)
III	11 (28%)
IV	7 (18%)

Table 5. Medical treatments after surgery

Treatment	No. of patients (%)
Expectant management	10 (25.7%)
Oral contraceptives	2 (5.1%)
GnRH agonists	25 (64.1%)
Danazol	2 (5.1%)

가 , 14 가

4 (10.2%) .

1 ,

(unicomuate uterus with rudimentary horn)

1 가 .

3 4

77.4%가 1 , 22.6%가 2

27%가 3 4

<sup>8,14</sup> .

Redw-

ine 'clear' and 'red' lesion

'black' lesion <sup>15</sup> .

10

10.5 76

6% 가

5-15% 가

<sup>6,12</sup> Emans

22 282

45%가

Laufer

4 (10%)

2 가 17 (44%) 가

, 3 4 가 28% 18%

가

22 46

70% <sup>8</sup> .

ery)

가

가

flow-sheet 가

가 ,

10 (25.7%), 2 (5.1%),

(GnRHα) 25 (64.1%), 2

(5.1%) 가

64.1% 가

Emmert 가

1 , , 가 ,

38.2%, 2 66.6%

8

(21%), 8 (21%), (18%),

(27%) ,

GnRHα compliance <sup>16</sup> .

GnRHα

1990 1995 2

GnRHα 가

39 20 21

가 29 (74.3%)

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=  
 =  
 :  
 : 10 (1990-1999) 21  
 39  
 Revised American Fertility Society  
 Classification  
 : 20.1 20 가 74.3% 가 (14-21).  
 . II가 44% 가 45% 가 III IV 가 46% 가 41%  
 GnRHa 가 64.1% 가  
 :  
 :