

=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

가 , 가 95%

가 , 가

가 , 가 (prevalence)

가 6% , Meigs 가

5-15% 가

가 1-5 가 6

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:

45%, 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

1990 1 1999 12  
 14 21  
 39  
 1985 AFS  
 (Revised American Fertility Society Classification of Endometriosis)  
 39 14 21  
 20 21 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) |    |

, endocoagulation, electrocoagulation,

4 (10%) 1 , 17  
 (44%)가 2 , 11 (28%)가 3 7 (18%)  
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 가 3 4  
 가 가  
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 (gonadotropin-releasing hormone agonists;  
 GnRHa) 가 25 (64.1%) GnRHa가  
 가 (Table 5). 가

Table 2. Age distribution at date of menarch, 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%)

(unicomuate uterus with rudimentary horn)

1 가

1 , 가

Laufer

77.4%가 1 , 22.6%가 2

3 4

27%가 3 4

<sup>8,14</sup>

Redw-

ine 'clear' and 'red' lesion

'black' lesion

10

15

10.5 76 6% 가

<sup>10,11</sup>

5-15% 가

<sup>6,12</sup> Emans

22 282

4 (10%)

2 가 17 (44%) 가

45%가 , 3 4 가 28% 18%

Laufer

가

22 46

70% <sup>8</sup>

ery) 가

가

가

flow-sheet 가

가 , 10 (25.7%), 2 (5.1%),

(GnRH) 25 (64.1%), 2 가

가 (5.1%)

64.1% 가

Emmert 가

1 , , 가 ,

38.2%, 2 66.6%

8

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

(27%)

GnRH compliance

<sup>16</sup>

1990 1995 1995 2 GnRH 가

GnRH 가

가 29 (74.3%) 39 20 21

가 . 10

가

가

가

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