

## (low grade squamous intraepithelial lesion)

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=Abstract=

### Clinical Evaluation of Women with Low Grade Squamous Intraepithelial Lesion on Pap Smears

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The purpose of this study was for clinical evaluating those women with low grade squamous intraepithelial lesions (LSIL) who have been detected on Pap smears.

We analyzed 279,270 Pap smears, from January 1994 to August 1997, of which 703 cases were identified as LSIL, and their medical records were reviewed retrospectively. Among them, 616 cases were able to follow-up by altered methods (repeated Pap smear only vs. histologic examination) and their efficacy for detecting more significant lesion (high grade squamous intraepithelial lesion: HSIL or invasive cancer) were also compared.

The results were as follows;

1. The frequency of LSIL on Pap smears was approximately 0.25%.
2. The mean age was 39 years (range 18 - 70 years).
3. Most of the gross finding of the cervix were normal or mild erosion.
4. Most of symptom was asymptomatic, or nonspecific.
5. Eighty-seven women with LSIL on initial Pap smears, have performed repeated Pap smears. 74 (85.1%) was normal, 7 (8.0%) was ASCUS, 6 (6.9%) was LSIL. Remained 529 women had subsequently histologic examination such as colposcopic directed biopsy or cone knife biopsy. These histologic results showed 192 (36.3%) with normal, 258 (48.8%) with LSIL, 77 (14.6%) with HSIL, 2 (0.4%) with microinvasive carcinoma.

Based on the results in this study, we emphasize the importance of regular screening procedures for early detection of cervical lesions because there was no specific clinical characteristics in women with cytologic diagnosis of LSIL. In addition, we recommended colpo-

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scopic directed biopsy or cone knife biopsy as follow-up evaluation method in women with LSIL on initial Pap smear for detecting more significant cervical lesion.

Keywords: LSIL, Repeat cytologic Examination, Colposcopic directed biopsy cone knife biopsy

HSIL) (low grade squamous intraepithelial lesion, LSIL)  
Bethesda System SIL 2

22% 가

1 가 .1) LSIL

1941 Papanicolaou (Pap smear) 가

.2) Pap smear

20 50% LSIL  
,36) 1976 Melamed (squamous atypia) 7)

1988 National Cancer Institute Bethesda Workshop The Bethesda System(TBS) 8) 1991 Bethesda System 9)

1994 1 1997 8 가 LSIL  
279,270 703 가  
1991 TBS 1995 가 616  
TBS CIN , LSIL  
10) LSIL

TBS Bethesda System 가

Ayre spatula, Cytobrush, Cervix brush 95% 가 Papa-  
(squamous dysplasia), nicolau 가  
(carcinoma intraepithelial neoplasia) 가 TBS  
(squamous intraepithelial lesion, SIL) 가  
(high grade squamous intraepithelial lesion,

TBS (mild dysplasia) virus(HPV) , (condensation) (koilocyte) tocyte) 3 LSIL (sheet) (mature, superficial type cell) 가 가 , 가

LSIL CIN I human papilloma 가 . HPV (dyskera-

338 (48%), 3 4 170 (24.2%) (Table 3).

Table 1. Age distributions

Age (year)	No. of cases (%)
10 19	1(0.1)
20 29	148(21.0)
30 39	219(31.2)
40 49	170(24.2)
50 59	131(18.6)
60 69	33(4.7)
70 79	1(0.1)
Total	703(100)

Table 2. Gravity

Gravity	No. of cases (%)
0	75(10.7)
1 2	193(27.5)
3 4	176(25.0)
5 6	122(17.4)
7 8	70(10.0)
9	51(7.3)
Unknown	16(2.3)
Total	703(100)

Table 3. Parity

Parity	No. of cases (%)
0	152(21.6)
1 2	338(48.0)
3 4	170(24.2)
5 6	25(3.6)
7 8	2(0.3)
Unknown	16(2.3)
Total	703(100)

mature keratinocytes가 1/3

1. 703 가 LSIL , 0.25% . 279,270

2. 30 40 가 55.3% 가 , 39 (Table 1).

3. (gravity) 0 27 3.87 , 75(10.7%) 가 (parity) 0 8 1.84 , 152 (21.6%), 1 2 가

4. 가 236 (33.6%) , 88 (12.5%) , 84 (11.9%), 76 (10.8%), 63 (9%), 31 (4.4%), 19 (2.7%) , 가 24 (3.4%), 82 (11.7%) (Table 4).

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Table 4. Main symptoms

Symptoms	No. of cases (%)
Asymptomatic	236(33.6)
Low abdominal pain	88(12.5)
Abnormal vaginal bleeding	84(11.9)
Abnormal cytology	82(11.7)
Infertility	76(10.8)
Leukorrhea	63(9.0)
Uterine myoma	31(4.4)
Menopausal symptom	19(2.7)
Others*	24(3.4)
Total	703(100)

Others\*: vulva pain 6 cases, vulva pruritus 9 cases, ovarian tumor 9 cases

5.

(85.5%), 393 (55.9%), 208 (29.6%), 72 (10.2%), 5 (0.7%), 6 (0.9%), 2 (0.3%), 13 (1.8%), 4 (0.6%) (Table 5).

Table 5. Gross findings of the cervix

Gross findings	No. of cases(%)
Normal	393(55.9)
Mild erosion	208(29.6)
Moderate erosion	72(10.2)
Severe erosion	5(0.7)
Polyp	6(0.9)
myoma of uterus	2(0.3)
Cervical cancer	4(0.6)
Atrophied cervix	13(1.8)
Total	703(100)

Table 7. Histologic results of LSIL on initial Pap smear

Diagnosis	No of cases(%)		
	Colposcopic directed biopsy	Cone knife biopsy	Total
Normal	163(40.2)	29(23.4)	192(36.3)
LSIL	205(50.6)	53(42.7)	258(48.8)
HSIL	37(9.1)	40(32.3)	77(14.6)
Microinvasive Ca	0(0)	2(1.6)	2(0.4)
Total	405(100)	124(100)	529(100)

6.

가 616 87, 529, 405, 124, 74 (85.1%), ASCUS(atypical squamous cells of undetermined significance) 7 (8.0%), LSIL 6 (6.9%) (Table 6).

Table 6. Repeated cytology results of LSIL on initial Pap smear

Diagnosis	No of cases(%)
Normal	74(85.1)
ASCUS	7(8.0)
LSIL	6(6.9)
Total	87(100)

405, 163 (40.2%), LSIL 205 (50.6%), HSIL 37 (9.1%), 124, 29 (23.4%), LSIL 53 (42.7%), HSIL 40 (32.3%) (microinvasive cancer) 2 (0.4%) (Table 7).

529, 192 (36.3%), LSIL 258 (48.4%), HSIL 77 (14.6%), 2 (0.4%) (Table 7).

가 HSIL 0%, 15%  
The Bethesda system(TBS) dysplasia/CIS

(CIN) SIL 36 39 가  
mild dysplasia/CIN I 15)  
CIN II 18  
severe dysplasia-CIS/CIN III 70 , 30 40 가 55.3%  
39  
가  
3 4 2 가  
가 가 . 10.7%,  
3 4 21.6%  
가  
가 , 가 35%,16)  
36%,17) 38.5%,18) Hall 39.9%,19) Mackay  
CIN I 40%, Young 46%, Creasman 47%20)  
(mild dysplasia) HPV 33.6%  
가 Bethesda System SIL 2  
LSIL 11.9%, 12%, Foote 16.7%,  
가 17 19%, Parker 25.1%, Copenhyer 42%  
LSIL colposcopic exophytic condylomas 40.5%  
가 squamocolumnar ju- 29.6%, 10.2%, 0.7%  
nction satellite area acetowhite area가  
shiny snow or gray white color ,  
fine caliber vessels or no surface vessels  
punctuation or mosaicism . iodine LSIL Goff (1994) 37  
mahogany brown mustard yellow (Leep surgery) 13  
Reid's colposcopic index (35%) , 16 (43%) LSIL ,  
0 2 8 (22%) HSIL .21) Flannelly  
LSIL Tayler (1994) LSIL mild moderate dyska-  
(1993) 17,000 184 (1.1%) 11) ryosis 227 (Punch biopsy)  
Awen (1994) 1,000 9 (0.9% (Large loop excision)  
%),12) Ollayos & Swogger(1995) 8,029 203 47.1% CIN 가 ,22)  
(2.5%) ,13) (1993) 30,428 Regi Pap smear LSIL 100  
284 (0.9%) .14) 279,270 , 51 (51%)  
703 (0.25%) LSIL, 10 (10%) HSIL LSIL  
가  
CIN , LSIL .23)  
LSIL 가  
87 6 (6.9%) ,

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405 242 (59.7%),  
 124 95 (76.6%)  
 2 (1.6%) (microinvasive carcinoma)  
 Pap smear LSIL  
 HSIL Maggi (1989)  
 20.4%,6 Walker (1986) 33%,24 Tayler (1993)  
 17%,11 Regi (1994) 10%,23 Boulger (1986)  
 39% ,25 Soutter (1988) mildly dyskeratotic smear 49% premalignant lesion

local ablative treatment

26  
 405 37 (9.1%),  
 124 42 (43.9%)  
 529 79 (15%) HSIL

Pap smear LSIL

가  
 LSIL

, HSIL

LSIL

가

1994 1 1997 8

279,270

703

가 가 616

1. LSIL  
 0.25%  
 2. 18 70  
 39  
 3.  
 4.  
 5. LSIL  
 87 74  
 (85.1%) , ASCUS 7 (8.0%), LSIL  
 6 (6.9%) , 529  
 192 (36.3%), LSIL 258 (48.4%),  
 HSIL 77 (14.6%), (microinvasive cancer) 2 (0.4%)

LSIL

가  
 가

가

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