Management of Patients with Mild Dysplasia on Cervical Cytology

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Abstract : *The study was carried out to find out the proper management of patients with mild dysplasia diagnosed on cervical cytology.*

Two hundred and twenty four patients with mild dysplasia on the initial cervical cytology and in whom colposcopy or other means for histopathologic taking had been performed within 3 months after taking the initial Pap smears between September 1978 and March 1988 were the subjects to be evaluated. Three hundred and sixty six (62%) of the 590 women with mild dysplasia on the initial Pap smears were lost to follow-up.

Thirty seven (16.5%) of 224 patients had cervical intraepithelial neoplasia (CIN) grade II or worse on histology and one patient had an invasive carcinoma. Mean age of the patients with CIN was 30 years and mean age was higher in association with the severity of CIN. The parity had no relationship with the severity of CIN.

Although only 16.5% of the patients had more severe histological diagnosis of the uterine cervix than those diagnosed by cervical cytology, it was clear that there was one case of invasive carcinoma and a large number of patients had been lost to follow-up. It is recommended that all patients with a smear report of mild dysplasia should be subjects for colposcopy. (Thai J Obstet Gynaecol 1991;2:23-27.)

Key words : management of mild dysplasia, cervical cytology

The decline in morbidity and mortality rates for invasive squamous cell carcinoma of the cervix over the past several decades attests to the importance of identifying women who are at a greater risk for developing this desease, examining them, and treating the condition as early as possible. Today, colposcopy, used in conjunction with cytology and histopathology, is a valuable diagnostic technique used throughout the world. Proper evaluation, treatment, and follow-up of Pap smears showing mild

dysplasia has been controversial. Some authors recommended immediate colposcopy for patients with an initial Pap smear of mild dysplasia because of a poor correlation between cytology and histopathology of the uterine cervix[1-6]. Other authors have suggested that these patients should be initially managed conservatively because of a high regression rate to a normal repeated smear[7-9]. We, therefore, intended to evaluate the histopathology of the uterine cervix whose initial cytology was mild dysplasia and to assess for risk factors associated with histopathology worse than CIN II.

Materials and Methods

All patients with mild dysplasia on the initial Pap smear at Srinagarind Hospital, Faculty of Medicine, Khon Kaen University from September 1978 to March 1988 were studied. All patients had histopathology of the uterine cervix by colposcopic directed biopsy, naked-eye punch biopsy, cervical conization or hysterectomy within 3 months after the initial Pap smear. The grading classification of our cytology laboratory is a modification between WHO[10] and Papanicolaou classifications. Data analysis consisted of 1) descriptive statistics to describe the characteristics of the subjects, and 2) inferential statistics to compare the characteristics of the subjects under different subgroups. Analysis of variance and *Student's t-test* were used as appropriate. Statistically significant difference was determined when p value was less than 0.05

Results

There were 590 patients with mild dysplasia on the initial Pap smear during the study period, 224 of which were available for study. The means for obtaining cervical histopathology are shown in Table 1. The cervical histopathology of all 224 patients is shown in Table 2, 16.5% of these women had cervical histopathology worse than mild dysplasia. Diagnostic conization was performed on 17 patients, 13 patients for CIN III after naked-eye punch biopsy, 2 patients for unsatisfactory colposcopic finding and 2 patients for discrepancy between cytology and histology. The final treatments for these 224 patients are shown in Table 3 which noted that 22% of these patients required further treatment. The range of ages of patients with CIN I and CIN II was 30-34 years while that of patients with CIN III was 35-39 years. The mean ages of patients with CIN I, CIN II and CIN III were 29.9±5.5, 32.0±7.4 and 36.7±9.9 years respectively. The means parity of patients with CIN I, CIN II and CIN III were 2, 2 and 3 respectively. The means parity of patients with CIN I, CIN II and CIN III were 2.1±0.9, 2.5±1.1 and 3.1 ± 0.8 respectively. There were no statistically significant difference between patients with histopathology of CIN II or worse and less severe than CIN II

Table 1 Methods of final histologic taking

Methods	No.	Per cent
Colposcopically directed biopsy	67	29.9
Cervical punch biopsy	12	5.4
Cervical conization	17	7.6
Hysterectomy specimen	16	7.1
Normal colposcopicfinding without colposcopically directed biopty	12	50.0
Total	224	100.0

Table 2 Colposcopic results and/or histopathology of the cervix

Histopathology	No. of Patients	Per cent
Unremarkable	19	8.5
Inflammation	38	16.9
CIN I	18	8.1
CIN II	12	5.4
CIN III	24	10.7
Invasive carcinoma stage IB	1	0.4
Normal colposcopic finding	112	50.0
Total	224	100.0

Table 3 Final treatment

Treatment	No. of Patients	Per cent
No treatment	48	21.4
Antibiotics	127	56.7
Cryosurgery	8	3.6
Therapeutic conization	3	1.4
Simple hysterectomy	37	16.5
Radical hysterectomy & pelvic node dissection	1	0.4
Total	224	100.0

Table 4 Comparison between patients with CIN II or worse and less severe than CIN II

Histopathology	Mean Age ± SD (Range in years)	Mean Parity ± SD (Range)
CIN II or worse	34.2 ± 8.6 (21-68)	2.7 ± 2.0 (0-12)
Less severe than CIN II	33.3 ± 10.0 (18-69)	2.2 ± 1.8 (0-9)
p value	NS (p>0.05)	NS (p>0.05)

NS = Not significant

in terms of mean age and parity, Table 4.

Discussion

This study reveals the presence of CIN and invasive cervical carcinoma in women attending a colposcopy clinic because of mild dysplasia on Pap smears. Sixteen and a half per cent of these patients had CIN II or worse on histology, despite the fact that only 5.1% had persistent mild dysplasia and only 3.8% had moderate dysplasia or worse on the repeat smear at the time of colposcopy. These patients required further appropriate treatment either cryosurgery, conization, hysterectomy or even radical hysterectomy. This data is not unique. In other studies, CIN II or worse was found in 49% to 69% of patients with mild dysplasia on cervical smears[3,4]. Sandmire et al[11] found that 20% of their patients whose initial smears were atypical had CIN III or worse, and in 55% of the patients with CIN III or worse the smear never became more severe than atypical. Seven of these women had invasive

cancer[11]. In a large British study, an initial Pap smear of mild dysplasia, 13% subsequently had a histological diagnosis of CIN or worse, 13% continued to have dyskaryotic smears and 51% had normal or atypical smears[12]. These authors emphasized the need for further investigation of all women with dyskaryosis regardless of grades[3,4,11,12]. It is clear that patients whose smears contain mild dyskaryotic cells are at a much higher risk of having cervical intraepithelial neoplasia or worse than women whose smears are normal[5,13].

The data from our study cannot demonstrate the association between age or parity with CIN II or abnormal cervical histopathology. Therefore, age and parity cannot be used as risk factors for the presence of CIN II or worse. The presence of cases of CIN and invasive carcinoma together with the high rate of loss to follow-up in patients with mild dysplasia on cervical cytology suggest that further immediate action should be taken rather than follow-up in these patients. Women whose cervical smears show dyskaryosis of any degree, even if mild dysplasia, should be refered for colposcopy. If a normal colposcopic finding is found, and a repeat smear is reported as being negative further confirmatory smear 6 months later would be prudent.

Concerning the limitation of this study, the prevalence of CIN II or worse on histology was less than what we had expected. This factor might decrease that accuracy of the prevalence of CIN II or worse in this study, but does not affect the conclusion of our study.

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