การใช้ห่วงไฟฟ้าตัดปากมดลูกในคนไข้ที่มีผลการตรวจทางเซลวิทยาของปากมดลูกเป็นแบบมะเร็งระยะก่อนลุกลามขั้นสูง หลังการตรวจปากมดลูกด้วยกล้องส่องขยายทางช่องคลอดในโรงพยาบาลบุรีรัมย์

LEEP Excision on Cervical Tissue in Patients with Abnormal Pap smear (HSIL) after colposcopic examination in Buriram hospital

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ABSTRACT

Background : Cervical cancer was the most frequently in female cancer cases. It can be diagnosed and treated by pap test, colposcope LEEP and conization

Objective : To study the diagnosis and treatment in patients having abnormal pap smear (HSIL) by using LEEP, without colposcope with directed biopsy.

Method : The data were collected from the medical records of the patients in Buriram hospital diagnosed of HSIL by pap smear screening test for 3 years.

Result : Out of 52 patients in this study, 27 patients (51.9%) had moderate dysplasia, 17 patients (32.6%) had severe dysplasia, 5 patients (9%) had invasive cancer and 5 patients (9%) had mild dysplasia. The study showed that the diagnosis of the patients of HSIL through cytologic screening test highly correlated with those through pathologic diagnosis (moderate and severe dysplasia)

Conclusion : Patients with cytologic diagnosis of HSIL could be diagnosed and treated by LEEP immediately after colposcopic examination without directed biopsy. This method was one of the good method in provincial hospitals that lacked of expert colposcopists.

Keywords : Cervical cancer, High - grade squamous intraepithelial lesion, : loop electrosurgical excision procedure, papanicoloau

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บทคัดย่อ

บทนำ : มะเร็งปากมดลูกเป็นมะเร็งที่พบบ่อยที่สุดในสตรี การวินิจฉัยและรักษาทำได้โดยการตรวจทางเซลวิทยาของปากมดลูก, กล้องส่องขยาย, ใช้ห่วงไฟฟ้าตัดปากมดลูก

วัตถุประสงค์ : เพื่อศึกษาผลการวินิจฉัยและรักษาในคนไข้ที่มีผลการตรวจทางเซลวิทยาของปากมดลูกเป็นแบบมะเร็งระยะก่อนลุกลามขั้นสูง โดยใช้ห่วงไฟฟ้าตัดปากมดลูกโดยไม่ต้องตัดชิ้นเนื้อที่ปากมดลูกตรวจในขณะที่ตรวจด้วยกล้องส่องขยาย

วิธีการศึกษา : ได้ทำการศึกษารวบรวมข้อมูลจากเวชระเบียนทางการแพทย์ของคนไข้ที่เข้ารับการตรวจและรักษาที่โรงพยาบาลบุรีรัมย์ ที่มีผลการตรวจทางเซลวิทยาของปากมดลูกเป็นแบบมะเร็งระยะก่อนลุกลามขั้นสูง ในช่วงเวลา 3 ปี โดยพิจารณาสรุปผลการตรวจทางพยาธิวิทยาชิ้นเนื้อของปากมดลูกจากการใช้ห่วงไฟฟ้าตัดปากมดลูก

ผลการศึกษา : คนไข้ที่เข้าศึกษา 52 คน พบว่าคนไข้ที่มีผลการตรวจทางพยาธิวิทยาของชิ้นเนื้อปากมดลูกเป็นมะเร็งแบบระยะก่อนลุกลามขั้นสูง 44 คน (ร้อยละ 84) เป็นมะเร็งระยะลุกลาม 5 คน (ร้อยละ 9) เป็นมะเร็งระยะก่อนลุกลามขั้นต่ำ 5 คน (ร้อยละ 9) จากผลการศึกษาพบว่าคนไข้ที่มีผลการตรวจทางเซลวิทยา เป็นมะเร็งระยะก่อนลุกลามขั้นสูง มีความเข้ากันได้สูงที่จะมีผลการตรวจชิ้นเนื้อทางพยาธิวิทยาเป็นมะเร็งก่อนลุกลามขั้นสูง

สรุป : คนไข้ที่มีผลการตรวจทางเซลวิทยาจากปากมดลูก เป็นแบบมะเร็งระยะก่อนลุกลามขั้นสูง สามารถทำการตรวจและรักษาโดยใช้ห่วงไฟฟ้าตัดปากมดลูกได้เลยหลังการตรวจด้วยกล้องส่องขยายทางช่องคลอดเท่านั้น โดยไม่ต้องตัดชิ้นเนื้อส่งตรวจขณะที่ตรวจด้วยกล้องส่องขยาย ซึ่งเป็นทางเลือกที่ดีอีกวิธีหนึ่ง โดยเฉพาะในโรงพยาบาลต่างจังหวัดที่ขาดแคลนบุคลากรที่เชี่ยวชาญทางด้านกล้องส่องขยายทางช่องคลอด

Introduction

Cervical cancer was the most frequently in female cancer cases. Moreover, about 500,000 new cases have been found in every year. Out of these cases, 80% have been found in developing countries and more than 50% have been found in Asia. Each year, 250,000 women have died of this disease[1]. However, Cervical cancer can be prevented by pelvic examination and pap test. When the pap test appears positive, the patients would be examined with colposcope with directed biopsy for histologic diagnosis. The further step was treated through LEEP or conization[2]

At present the results of pap test were interpreted through Bethesda system 2001. The patients who were diagnosed positive cytologic pap smear of HSIL are in the same class as moderated dysplasia (CIN2) severe dysplasia (CIN3) or CIS in CIN system. The standard treatment is performing colposcope with directed biopsy in the suspicious area, followed by LEEP and endocervical curettage (ECC.)[3]. If the tissue from ECC shows mild dysplasia (CIN1), the treatment is observation by following pap test every 6 month. But if the tissue from ECC shows moderate dysplasia (CIN2) or severe dysplasia (CIN3) the treatment of the next step is LEEP followed by endocervical curettage (ECC). If the tissue from LEEP and ECC shows moderate or severe dysplasia with free LEEP margin (no detection of disease at margin). At this state of treatment, the diagnostic LEEP can be the therapeutic LEEP too. But if tissue margin from LEEP shows disease (positive LEEP margin), the further treatment will be pap smear, colposcope, re-excision with LEEP, conization or hysterectomy depending on each case's characteristic.

In the present time LEEP or LLETZ (Large Loop Excision of Transformation Zone) is a popular, safe, inexpensive, effective and easy to perform instrument[4]. If can be both diagnostic and therapeutic for the patient with CIN2 and CIN3. When the pathological diagnosis is positive LEEP margin, re-excision with LEEP can be performed. Complication from LEEP performance was about 5% such as bleeding, infection, cervical stenosis, cervical incompetence, etc.

"See and Treat" or "Look and LLETZ"[5] is the treatment for patients with abnormal pap smear (HSIL). It is followed by colposcope. If no evidence of invasive cancer is found, immediate LEEP can be performed (See only) without directed biopsy. With this treatment, the cost is low. The patients can reduce their visits. According to the study of Berdischevsky et al[3], This 2 step protocol (See and Treat) has no different results from the 3 step protocol (Colposcope with directed biopsy and Treat)[6]

Objective of study

To study the diagnosis and treatment in patients having abnormal pap smear (HSIL) by using LEEP, without colposcope with directed biopsy.

Abbreviations

HSIL : High - grade squamous intraepithelial lesion, LEEP : loop electro-surgical excision procedure, Pap : papani-coloau

Material and Method

Data was collected during January 2005 - January 2008 at OB-GYN department, Buriram hospital, 52 patients with abnormal pap smear (HSIL) were examined by colposcope after the application of 5% acetic acid. All cases were examined without biopsy and then followed by LEEP

LEEP was performed under local anesthesia with Xylocaine 2% The size of LEEP varied with the size of cervix. The diathermy power was set at 50 W cut and 40 W coagulation in blended mode. Hemostasis was controlled by electrode.

Loop excision speciment were immediately fixed in formalin for histologic examination. Tissue specimens were interpreted by Pathologist. The results of pap smear and histologic findings were compared. Statistics analysis was done with descriptive analysis with percentage.

Results

The 52 patients in this study were 26-52 years of age ; their average age was 45. All of them had been diagnosed of pap smear (HSIL) and were treated through LEEP. In Table 1, the results were demonstrated that 5 (9.6%). mild dysplasia (CIN1), 27 (51.9%) moderate dysplasia (CIN2), 17 (32.6%) severe dysplasia (CIN3) and 5 (9.6%) invasive squamous cell carcinoma.

This showed that 9.6% (mild dysplasia) got overtreatment while 84.5% (moderate and severe dysplasia) got same results through cytological diagnosis.

Table 1

Pap test	LEEP specimens				ECC specimens	
HSIL	Mild (%)	Moderate (%)	Severe (%)	Invasive (%)	Chronic cervicitis (%)	Not record (%)
52	5 (9.6)	27 (51.9)	17 (32.6)	5 (9.6)	23 (44.2)	29 (55.7)

Discussion

The treatment of women for abnormal pap smear (HSIL) through "See and treat" or "Look and LLETZ" or 2 step protocol method is convenient and quick. Gynecologists who have no skills on colposcope can do it. Any patients with abnormal pap smear (HSIL) and malignancy on coloposcope could be examined through LEEP. If pathological diagnosis is moderate or severe dysplasia and the specimen has free LEEP margin, this performance becomes diagnostic and therapeutic LEEP. Only 6%[8] of patients possibly overtreated. The method is simple, economical, time saving, effective and slightly complicated; it suits developing countries. With the 3 step protocol, skill colposcopists are needed, the cost is higher, a lot of patients' time is consumed and they are likely to lose follow up[9,10]

From the study of 52 patients who had pap smear (HSIL) having "See and Treat" treatment, it was found that more than 80% of them had moderate and severe dysplasia, and less than 10% got overtreatment. Same as results of Berdichevsky[3] Sadan[6]. The other patients (less than 10%) who had invasive squamous cell carcinoma were refer to tertiary hospital for further treatment.

Conclusion

"See and Treat" is the suitable method for all the patients with abnormal pap smear (HSIL) in Thailand, especially in provincial hospitals which lack experts on colposcope, it is a good answer because it is easy, convenient, safe and economical. Moreover, is does not need an expert to perform. Hower, its weakness is that it shouldn't be used with nulliparous or adolescents.

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