Coll. Antropol. **34** (2010) 1: 219–224
Professional paper

Cervical Cytology and HPV Test in Follow-up after Conisation or LLETZ

Damjana Verša Ostojić[1], Danijela Vrdoljak-Mozetič[1,4], Snježana Štemberger-Papić[1], Aleks Finderle[2,4] and Senija Eminović[3,4]

[1] Department of Gynecological Cytology, Department of Gynecology and Obstetrics, University Hospital Center Rijeka, Rijeka, Croatia
[2] Department of Perinatology, Department of Gynecology and Obstetrics, University Hospital Center Rijeka, Rijeka, Croatia
[3] Department of Pathology, University of Rijeka, School of Medicine, Rijeka, Croatia
[4] University of Rijeka, School of Medicine, Rijeka, Croatia

ABSTRACT

The patients treated with conservative surgical therapy for cervical intraepithelial neoplasia (CIN) have an increased risk to develop invasive cervical carcinoma compared to the general population. Cervical cytology and HPV test are included in the protocols for the detection of treatment failure. The purpose of the study was to analyse cytology-histology correlation after conisation or Large Loop Excision of the Transformation Zone (LLETZ), resection margin status, compliance to the follow-up protocol and evaluation of cervical cytology and HPV testing in two year period after surgical treatment. We retrospectively reviewed 251 cases of conisation or LLETZ performed between January and December, 2006. Conventional cervical smears were analysed and abnormal cytology was defined as atypical squamous cells of undetermined significance or worse (ASCUS+). The digene Hybrid capture 2 test was used for detection of high-risk HPV types. Histology analysis demonstrated CIN1+ lesion in 234 cases (93.2%) with cytology-histology correlation in 97.9% of cases. A preoperative HPV test was made in 142 histologically confirmed CIN1+ lesions and 137 (96.5%) tested positive. The resection margins were involved in 48 (20.8%) cases. In 24 (10.3%) cases the margins were difficult to determine. Abnormal cytology was found in 33 (15.2%) cases of the 217 (86.5%) patients that attended the post-treatment visits. The post-treatment HPV test was performed on 159 women and it was positive in 25 (15.7%) cases. The complete follow-up control cytology, with at least three Pap smears in the subsequent two years or with second treatment, was registered in only 146 (58.2%) patients. 14/217 (6.5%) patients underwent second treatment with histologically confirmed treatment failure. In all patients with control smear, repeated cytology found HSIL. On six women, the control HPV test was performed. In five cases, it was positive and in one case with histological diagnoses of VAIN2, it was negative. Our study confirms the important role of cervical cytology in the diagnosis of cervical intraepithelial lesions and monitoring after treatment. In the future we will have to improve compliance to the follow-up protocols and use of the HPV test in the selection of women at risk of treatment failure.

Key words: *cervical intraepithelial neoplasia, cervical cytology, human papillomavirus, conisation, LLETZ, follow-up*

Introduction

The incidence ratio of cervical cancer has decreased in developed countries during the past few decades due to cytology based opportunistic or organised screening programmes for the detection of precancerous lesions. It has been recognized that persistent infection with high-risk human papillomavirus (HPV) is necessary for development and maintenance of high-grade cervical intraepithelial neoplasia (CIN) and for progression to cervical cancer[1-3]. Conservative methods are recommended procedures for treatment of high-grade CIN especially for young women. The excisional surgical methods, such as cold knife conisation or Large Loop Excision of the Transformation Zone (LLETZ) are performed for both diagnostic and therapeutic purposes and they provide a specimen for histological diagnosis and assessment of the excisional margins. Several risk factors for treatment

Received for publication July 31, 2009

failure have been analysed, including the positive or uncertain excision margins, extension of the lesion to the endocervical glands, satellite lesions of HPV infection located outside the transformation zone, patient's age, HPV viral load and grade of the lesion. Regardless of the destructive or excisional surgical treatment of CIN there is a risk of treatment failure[4]. A recent meta-analysis and a retrospective cohort study linking cancer registered data with treatment history showed that these women have four to five times an increased risk in developing invasive cervical cancer in the following 10 to 20 years upon conservative surgical treatment compared to the general population[5,6]. This data indicates the necessity of close surveillance following treatment in order to reduce the risk of invasive cancer. In medical databases many reports analyse and re-evaluate methods and protocols for detection of treatment failure in patients treated for CIN. Most persistent or recurrent diseases are detected within the first two years after treatment[7]. Cervical cytology is important in the monitoring of patients after treatment with limitation of lower sensitivity. With the introduction of validated HPV testing in clinical practice the follow-up protocols allow more accurate selection of those women not at risk for residual or recurrent disease, from those requiring close surveillance.

The aim of this study was to analyse cytology-histology correlation after conisation or LLETZ for cervical intraepithelial lesions, resection margin status, compliance to the follow-up protocol and evaluation of cervical cytology and HPV testing in the two year period after surgical treatment.

Materials and Methods

A retrospective study was made at the Department of Gynecological Cytology, Department of Gynecology and Obstetrics, University Hospital Centre Rijeka, Croatia, where 251 patients underwent conisation (N=141) or LLETZ (N=110) between January and December 2006.

At the pretreatment visit conventional cervical smears were collected, analysed and classified according to the »Zagreb 2002« classification[8], a modification of the 2001 Bethesda System[9], that was used for cytological classification. Abnormal cytology was defined as atypical squamous cells of undetermined significance or worse (ASCUS+).

Digene Hybrid Capture 2 test was used for detection of HPV DNA, with cocktail probes for 13 high-risk types (16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59 and 68). Cervical samples were collected with Digene Cervical Sampler and the test was performed following the manufacturer's instructions (QIAGEN, Gaithersburg, USA).

Conisations or LLETZ were performed after abnormal cytology finding was obtained and after colposcopic examination. The material underwent histological analysis and was classified according to the WHO criteria[10].

Preoperative analysis included initial cervical cytology and the HPV test. Histological features included histologic diagnosis with resection margins status and cytology-histology correlation was assessed as well. Excision margins were positive when endocervical and/or ectocervical margins showed dysplasia. In the two year follow-up period we analysed compliance to the follow-up protocol, cervical cytology and the HPV test for detection of treatment failure. The presence of histologically confirmed CIN 1+ was considered as treatment failure.

Results

In the one year period out of the 251 patients, 141 were treated by conisation and 110 by LLETZ. The mean age of the patients was 36.1 years (range 19- 63 years).

The initial cytology included 7 (2.8%) ASCUS, 12 (4.8%) atypical squamous cells- could not exclude HSIL (ASC-H), 2 (0.8%) low grade squamous intraepithelial lesion (LSIL), 189 (75.3%) high grade squamous intraepithelial lesion (HSIL), 17 (6.8%) HSIL-could not exclude micronivasion, 6 (2.4%) HSIL/CIN3 associated with atypical glandular cells (AGC), 1 (0.4%) adenocarcinoma in situ (AIS), 2 (0.8%) HSIL/CIN 3 associated with AIS, and 6 (2.4%) carcinomas (in 4 cases cytology indicated a microinvasive lesion). Of the remaining 9 (3.5%) patients 4 underwent conisation for CIN detected on biopsy, and in 5 cases the initial cytology was not available. After surgical treatment of 251 patients, histology analysis demonstrated CIN1+ lesion in 234 cases (93.2%). Histology diagnoses included 13 CIN1, 185 CIN2/3, 2 AIS, 3 CIN3+ AIS, 26 microinvasive carcinomas, 1 microinvasive carcinoma associated with AIS and 4 invasive carcinomas. Overall, histology evaluation showed 203 (86.8%) cervical intraepithelial lesions, 27 microinvasive carcinomas (11.5%), and 4 invasive carcinomas (1.7%).

In 17 cases (6.7%) of negative histology initial cytology finding was ASCUS in 3 cases, ASC-H in 1, HSIL in 9, in 3 cases patients underwent conisation for CIN detected on biopsy, and in 1 case the initial cytology was not available.

The initial cytology and cytology-histology correlation are summarised in Table 1.

Comparing initial cytology with histology diagnosis, cytology-histology correlation for CIN 1+ was found in 97.9% of cases, and for CIN 2+ in 95.5%.

HPV testing was made preoperatively on 159 patients (63.3%) and 150 (94.3%) tested positive. In 234 cases of histology confirmed CIN 1+ lesions the initial HPV test was made in 142 cases; 137 tested positive, while 3.5% tested negative (CIN 1 in 2 cases, CIN 3 in 2 cases, and 1 case of microinvasive carcinoma).

At least one post-treatment visit with control cytology was attended by 217 patients (86.5%). The first control cytology was taken 4–6 months after surgical procedure and was abnormal in 45 (20.7%) patients including 21 ASCUS, 1 AGC, 8 ASC-H, 4 LSIL and 11 HSIL. In the subsequent follow-up period, abnormal cytology was found in 33 (15.2%) patients including 12 ASCUS, 7 ASC-H, 3 LSIL and 11 HSIL (1 case of HSIL/VAIN 2).

TABLE 1
THE INITIAL CYTOLOGY AND CYTOLOGY-HISTOLOGY CORRELATION

Cytology	Histology							
	Neg	CIN 1	CIN2/3	CIN3 +AIS	AIS	MIC +AIS	MIC	Carcinoma
ASCUS	3		4					
ASC-H	1	1	9				1	
LSIL			2					
HSIL	9	11	153				16	
HSIL/could not exclude microinvasion			10				6	1
HSIL/CIN3+AGC			3	1			1	1
HSIL/CIN3+AIS				1	1			
AIS				1				
Carcinoma			1			1	2	2
Negative					1			
Prior biopsy or unknown cytology	4	1	3					

CIN – cervical intraepithelial neoplasia, ASCUS – atypical squamous cells of undetermined significance, ASC-H – atypical squamous cells, cannot exclude HSIL, LSIL – low grade squamous intraepithelial lesion, HSIL – high grade squamous intraepithelial lesion, AGC – atypical glandular cells, AIS – adenocarcinoma in situ, MIC – microinvasive carcinoma

Analysing the women's compliance to the post-treatment visits, the complete follow-up control cytology, with at least three Pap smears in two years or with second treatment, was performed on only 146 patients (58.2%).

The HPV test was performed on 159 of 217 women (73%) who attended the post-treatment visits and resulted positive in 25 cases (15.7%). In 6 patients the HPV test was positive with negative cytology in the two-year follow-up.

The resection margins were involved in 48 (20.5%) of 234 histologically confirmed CIN1+ lesion with subsequent abnormal control cytology in 12 (25%) cases. In 24 (10.3%) cases the margins were difficult to determine and in 162 (69.2%) the margins were negative with abnormal control cytology in 5 (20.5%) cases and 16 (9.9%) cases respectively. The correlation of resection margins status with abnormal control cytology findings and positive histology in the second surgical treatment are shown in Table 2.

After the first surgical treatment, 24/251 (9.6%) patients underwent second treatment by biopsy of vagina (N=1), LLETZ (N=1), conisation (N=11) or hysterectomy (N=11) for abnormal control cytology and also for non-cervical neoplasia reasons. In the second treatment, 14/217 (6.5%) who attended follow-up visits showed residual or recurrent disease. In the first treatment, 1 patient had negative LLETZ, while all other patients had CIN2+ lesion. The treatment failure was found more often with positive resection margins (10/48 cases, 20.5%) compared with the cases when margins were difficult to determine (2/24 cases, 8.3%) or negative (2/162 cases, 1.2%) Table 3 demonstrates resection margins status,

TABLE 2
THE CORRELATION OF RESECTION MARGINS STATUS WITH ABNORMAL CYTOLOGY FINDING AND POSITIVE HISTOLOGY AFTER SECOND SURGICAL PROCEDURE

Margins	N (%)	Abnormal control Cytology	Positive histology after second treatment
Positive	48 (20.5%)	12 (25%)*	10 (20.8%)*
Difficult to determine	24 (10.3%)	5 (20.8%)*	2 (8.3%)*
Negative	162 (69.2%)	16 (9.9%)*	2 (1.2%)*
Total	234	33	14

*percentage of abnormal control cytology and positive histology after second treatment comparing with resection margins

TABLE 3
RESECTION MARGINS STATUS, CERVICAL CYTOLOGY AND HPV TEST IN FOLLOW-UP IN PATIENTS WITH AND WITHOUT TREATMENT FAILURE ON SECOND TREATMENT

Characteristics	No disease* (N=10)	Treatment failure (N=14)
Margins		
– negative	1	2
– positive	7	10
– uncertain	2	2
Cytology		
– negative	2	–
– abnormal	2	7
HPV test		
– negative	–	1
– positive	2	5

*patients who underwent second treatment also for non-cervical neoplasia reasons

control cytology and the HPV test results in the patients' follow-up with and without treatment failure in the second treatment.

The average period to histology confirmed residual or recurrent disease was 10 months (min 1, max 35 months). In the group of patients with treatment failure in 7 cases there was no repeated cytology and in 7 women the follow-up smear showed HSIL. In 6 women the control HPV test was performed; in 5 cases it was positive and in 1 case with VAIN2, it was negative. The characteristics of women with treatment failure are shown in Table 4.

Discussion

The sensitivity and specificity of the conventional cervical smear cytology are not known precisely but evidence of effectiveness is accepted from observational studies[11]. Current Croatian guidelines for management of premalignant cervical lesions confirm the important role of cervical cytology[12]. Our study compared initial cervical cytology with histology verification of cervical intraepithelial lesions on conisations or LLETZ and found high cytology-histology correlation (97.9% for CIN 1+ lesions and 95.5% for CIN 2+) with only 13/251 cases with negative histological findings. Within this group, preoperative HPV testing was positive in 7 of 11 patients (64%) where the HPV test was performed. Analysing cases with disagreement of cytology with histology 2 cases where found where surface epithelium was detected on the histology specimen with no possibility of detection of intraepithelial lesion, 1 case of atypical squamous metaplasia and 1 case of microglandular metaplasia on histology specimen. In 1 case of second treatment with biopsy of the vagina VAIN 2 was diagnosed on histology. In all other cases, initial cytology was confirmed upon revision of cytologyc specimens by two cytologists and the disagreement could be explained with sampling problems for the histology analysis. The disagreement was found more often on LLETZ specimens (in 7 cases) than on conisation with cold knife (in 4 cases).

Preoperative HPV testing was performed on 63.3% of treated patients with a 97.8% positive results if only histologically confirmed CIN2+ lesions were included. These results are similar to review of Paraskevaidis et al. of 873 patients treated for high grade CIN with positivity of 98.3%[13]. Aerssens et al. reported 11% of negative HPV test in patients treated for CIN 2/3[14], while in our study HPV test was negative in 3.5% of histology confirmed CIN1+ lesions indicating the high sensitivity of the test in our material.

Resection margins status was analysed in many studies as a risk factor for residual disease. Soutter et al. found that evaluation of the excision margin status does not reliably predict residual or persistent disease[5]. Ejisink et al. reported that patients with involved excision margins had a three times higher overall risk of developing a subsequent HSIL[15]. They reported positive resection margins in 19.6% after conisation or LLETZ and in 19.2% margins were difficult to determine. Our results indicate similar percentage of positive margins (20.5%), while lower finding of uncertain margins (10.3%), may be due to greater proportion of cold knife conisations. We found abnormal control cytology and treatment failure in greater proportion when margins were positive (25% and 20.8% respectively) or difficult to determine (20.8% and 8.3% respectively) compared to the findings with negative resection margins (9.9% and 1.2% respectively).

TABLE 4
CHARACTERISTICS OF WOMEN WITH TREATMENT FAILURE

Case	Age	First treatment	Histology	Cone margins	Pap smear	HPV test	Time (months)	Second treatment	Histology
1.	45	conisation	MIC	+	X	X	2	hysterectomy	Cancer
2.	45	conisation	Cancer	+	X	X	2	hysterectomy	Cancer
3.	38	conisation	CIN 3	+	HSIL	+	10	LLETZ	CIN 2
4.	30	conisation	CIN 3	–	HSIL	+	24	conisation	CIN 2
5.	38	conisation	MIC	+	X	X	1	conisation	CIN 3
6.	35	conisation	MIC	+	X	+	2	hysterectomy	CIN 3
7.	38	LLETZ	CIN 3	+	X	X	3	conisation	CIN 1
8.	40	LLETZ	CIN 3	+	X	X	2	conisation	CIN 2
9.	47	LLETZ	CIN 2	+	X	+	25	conisation	CIN 2
10.	63	LLETZ	CIN 3	susp.	HSIL	+	20	hysterectomy	CIN 2
11.	42	LLETZ	CIN 3	susp.	HSIL	X	8	conisation	CIN 3
12.	48	LLETZ	negative	_	HSIL/VAIN2	–	35	biopsy	VAIN 2
13.	34	LLETZ	CIN 3	+	HSIL	X	6	conisation	CIN 3
14.	38	LLETZ	CIN	+	HSIL	X	5	conisation	MIC

CIN – cervical intraepithelial neoplasia, HSIL – high grade squamous intraepithelial lesion, VAIN – vaginal intraepithelial neoplasia, MIC – microinvasive carcinoma, X – the test was not performed

This study showed that 13.5% of the women did not attend the follow-up controls in two-year post-treatment period. Chew et al. reported 12% default to regular cytological controls in at least seven years of the follow-up period at the regional laboratory[7]. Eijsink et al. reported a decline in compliance to the follow-up protocol from 86.2% for first to 64.8% for second cervical smears, while only 51.2% of the patients treated for HSIL with LLETZ completed the total follow-up program in the first two years[15]. Our study showed that the complete follow-up control cytology with at least three Pap smears in two years or with second treatment was followed only by 146 patients (58.2%) indicating the need of informing and educating the patients about their disease and importance of post-treatment controls.

This study showed the HPV test was performed in 73.3% patients who attended the post-treatment visits, but test were not always taken at the first visit (4–6 months after treatment). The used HPV assay does not differentiate between specific HPV types and we cannot exclude a possible role of reinfection. This indicates the need of improvement in the use of the HPV test with its advantage in early prediction of treatment failure, and in the cases of negative HPV test to shorten the follow-up period after treatment of CIN. In our study 6 women had positive post-treatment HPV test with normal cytology in two-year follow-up period indicating a need for close controls for these patients. According to other studies, persistent post-treatment high-risk HPV is a risk factor for subsequent CIN[16,17] and these patients should undergo colposcopy and close follow-up[13].

In the present study out of 217 women who attended to at least one post-treatment control, abnormal control cytology was found in 33 (15.2%) cases and treatment failure occurred in 14 (6.5%) patients. Failure of treatment for CIN 3 has been reported to vary between 5 and 25%, but in our study not all women attended the post-treatment visits. We found that the median period to histology confirmed treatment failure was 10 months, and in 12/14 (85.7%) the second treatment was performed within two years. Chew et al. reported 9% further treatment in long term follow-up period, 52% of those within the first year from the treatment, 19% within the second year, 4% in the third, 5% in the fourth and fifth years, and 15% over the next five years. They found no recurrent lesions after ten years[7].

According to the current guidelines, women treated for CIN are followed for at least 2 years after treatment. The prolonged follow-up is recommended because late reoccurrences have been reported[5,7,18] what is in accordance with our daily work experience. Chew et al. recommended the need of annual follow-up for 10 years to reduce the risk of post-treatment invasive disease[7].

Many authors confirm the advantages of combined cytology and HPV testing[14,18–20]. The American Society for Colposcopy and Cervical Pathology (ASCCP) suggested repeat cytology at 4–6 month intervals for up to 2 years and yearly thereafter with HPV testing at 12 months after treatment[18]. Nobbenhius et al.[20] and Zielinski et al.[19] recommended monitoring women 6 months after initial treatment both by cervical cytology and HPV testing and retesting after 24 months, to avoid missing cervical carcinomas because of detection problems. If both tests are negative at 24 months, they referred to routine screening program.

Conclusion

This study confirms the importance of cervical cytology in diagnosis of cervical intraepithelial lesions and monitoring after treatment. In the future we have to improve compliance to the follow-up protocols and reach an optimal follow-up algorithm with cytology and HPV testing for detection of women at risk of treatment failure that will reduce the risk of invasive cancer following conservative surgical therapy for CIN.

REFERENCES

1. NOBBENHUIS MA, WALBOOMERS JM, HELMERHORST TJ, ROZENDAAL L, REMMINK AJ, RISSE EK, VAN DER LINDEN HC, VOORHORST FJ, KENEMANS P, MEIJER CJ, Lancet, 3 (1999) 354. — 2. BOSCH FX, LORINCZ A, MUÑOZ N, MEIJER CJLM, SHAH KV, J Clin Pathol, 55 (2002) 244. — 3. CUSCHIERI KS, CUBIE HA, WHITLEY MW, GILKISON G, ARENDS MJ, GRAHAM C, MCGOOGAN E, J Clin Pathol, 58 (2005) 946. — 4. NUOVO J, MELNIKOW J, WILLAN AR, CHAN BK, Int J Gynaecol Obstet, 68 (2000) 25. — 5. SOUTTER WP, DE BARROS LOPES A, FLETCHER A, MONAGHAN JM, DUNCAN ID, PARASKEVAIDIS E, KITCHENER HC, Lancet, 349 (1997) 978. — 6. KALLIALA I, ANTTILA A, PUKKALA E, NIEMINEN P, BMJ, 331 (2005) 1183. — 7. CHEW GK, JANDIAL L, PARASKEVAIDIS E, KITCHENER HC, Int J Gynecol Cancer, 9 (1999) 487. — 8. OVANIN-RAKIĆ A, PAJTLER M, STANKOVIĆ T, AUDY-JURKOVIĆ S. LJUBOJEVIĆ N, GRUBIŠIĆ G, KUVAČIĆ I, Gynaecol Perinatol, 12 (2003) 148. — 9. SOLOMON D, DAVEY D, KURMAN R, MORIARTY A, O'CONNOR D, PREY M, RAAB S, SHERMAN M, WILBUR D, WRIGHT T, YOUNG N, JAMA, 287 (2002) 2114. — 10. SCULLY RE, BONFIGLIO TA, KURMAN RJ, SILVERBERG SG, WILKINS EJ, Histological typing of female genital tract tumors (Springler-Verlag, Berlin, 1994). — 11. SOOST HJ, LANGE HJ, LEHMACHER W, RUFFING-KULLMANN B, Acta Cytol, 35 (1991) 8. — 12. LJUBOJEVIĆ N, BABIĆ S, AUDY-JURKOVIĆ S, OVANIN-RAKIĆ A, JUKIĆ S, BABIĆ D, GRUBIŠIĆ G, RADAKOVIĆ G, LJUBOJEVIĆ-GRGEC D, Coll Antropol, 25 (2001) 467. — 13. PARASKEVAIDIS E, ARBYN M, SOTIRIADIS A, DIAKOMANOLIS E, MARTIN-HIRSCH P, KOLIOPOULOS G, MAKRYDIMAS G, TOFOSKI J, ROUKOS DH, Cancer Treat Rev, 30 (2004) 205. — 14. AERSSENS A, CLAEYS P, BEERENS E, GARCIA A, WEYERS S, VAN RENTERGHEM L, PRAET M, TEMMERMAN M, VELASQUEZ R, CUVELIER CA, Cytopathology, 20 (2009) 27. — 15. EIJSINK JJ, DE BOCK GH, KUIPER JL, REESINK-PETERS N, VAN HEMEL BM, HOLLEMA H, NIJMAN HW, MOURITS MJ, VAN DER ZEE AG, Gynecol Oncol, 113 (2009) 348. — 16. PARASKEVAIDIS E, KOLIOPOULOS G, ALAMANOS Y, MALAMOU-MITSI V, LOLIS ED, KITCHENER HC, Obstet Gynecol, 98 (2001) 833. — 17. SONG SH, LEE JK, OH MJ, HUR JY, NA JY, PARK YK, SAW HS, Gynecologic Oncology, 101 (2006) 418. — 18. WRIGHT TC, MASSAD LS, DUNTON CJ, SPITZER M, WILKINSON EJ, SOLOMON D, Am J Obstet Gynecol, 197 (2007) 346. — 19. ZIELINSKI GD, BAIS AG, HELMERHORST TJ, VERHEIJEN RH, DE SCHIPPER FA, SNIJDERS PJ, VOORHORST FJ, VAN KEMENADE FJ, ROZENDAAL L, MEIJER CJ, Obstet Gynecol Surv, 59 (2004) 543. — 20. NOBBENHUIS MA, MEIJER CJ, VAN DEN BRULE AJ, ROZENDAAL L, VOORHORST FJ, RISSE EK, VERHEIJEN RH, HELMERHORST TJ, Br J Cancer, 84 (2001) 796.

D. Verša Ostojić

Department of Gynecological Cytology, Department of Gynecology and Obstetrics, University Hospital Center Rijeka, Cambierieva 17/5, 51000 Rijeka, Croatia
e-mail: dversa.ostojic@gmail.com

CERVIKALNA CITOLOGIJA I HPV TEST U PRAĆENJU PACIJENTICA NAKON KONIZACIJE I LLETZ-A

S A Ž E T A K

Pacijentice liječene konzervativnom kirurškom terapijom radi cervikalne intraepitelne neoplaziije (CIN) imaju povećani rizik za razvoj invazivnog karcinoma vrata maternice. Cervikalna citologija i HPV test su metode uključene u postupnike za otkrivanje neuspjeha liječenja. Cilj rada je analiza citološko-histološke korelacije nakon konizacije ili ekscizije transformacijske zone pomoću dijatermijske omče (LLETZ), analiza resekcijskih rubova ekscizata, analiza odaziva pacijentica na protokol praćenja te evaluacija cervikalne citologije i HPV testa u dvogodišnjem praćenju nakon liječenja. Retrospektivnom analizom 251 zahvata konizacije (N=141) i LLETZ-a (N=110) učinjenih između siječnja i prosinca 2006. godine, obrađeni su rezultati nalaza konvencionalnih citoloških uzoraka i digene Hybrid capture II testa za detekciju 13 visoko-rizičnih HPV tipova. Histološkom analizom nađena je CIN 1+ lezija u 234 slučaja (93,2%), s citološko-histološkom korelacijom od 97,9%. Preoperativni HPV test rađen je u 142 slučaja histološki potvrđene CIN 1+ lezije i u 137 slučajeva (96,5%) je bio pozitivan. Resekcijski rubovi bili su pozitivni u 48 slučaja (20,5%) a u 24 slučaja (10,3%) rubovi se nisu mogli procijeniti. Abnormalna kontrolna citologija nađena je u 33 (15,2%) od 217 pacijentica koje su pristupile kontroli nakon liječenja. Kontroni HPV test bio je pozitivan u 25/159 (15,7%) slučaja. Potpuno praćenje s barem tri Papa testa u dvije godine ili s drugim kirurškim zahvatom nađeno je u samo 146 (58,2%) pacijentica. Kod 14 (6,5%) pacijentica pri drugom kirurškom zahvatu histološki je dokazan neuspjeh liječenja. Kod onih pacijentica kod kojih je učinjena kontrolna citologija nađena je skvamozna intraepitelna lezija visokog stupnja. U šest žena rađen je kontroni HPV test, u pet slučajeva bio je pozitivan dok je u slučaju histološki potvrđene vaginalne intraepitelne lezije (VAIN2) na biopsiji nalaz bio negativan. Naši rezultati potvrđuju važnost cervikalne citologije u dijagnostici cervikalnih intraepitelnih lezija i praćenju nakon liječenja. U budućnosti moramo poboljšati odaziv žena na kontrolne preglede nakon zahvata kao i korištenje HPV testa za otkrivanje pacijentica s rizikom od neuspješnog liječenja.