Outcome of repeat loop electrosurgical excision procedure of the cervix: is repeat procedure necessary in margin positive cases?

Ga Won Yim, Young Tae Kim, Sang Wun Kim, Sunghoon Kim, Jae Wook Kim, Eun Ji Nam

Division of Gynecologic Oncology, Department of Obstetrics and Gynecology, Yonsei University College of Medicine, Seoul, Republic of Korea

목적: We sought to evaluate the outcome of repeat loop electrosurgical excision procedure (LEEP) in patients with cervical intraepithelial neoplasia with initial margin positive results.

방법: Medical records of 324 patients with margin positive results after receiving LEEP for high grade cervical lesion between October 2003 to May 2010 were retrospectively reviewed. Data collected included demographic and clinical information as well as cytologic and histologic results. High-risk HPV infection was detected with Hybrid Capture II (HC-II; Digene, Gaithersburg, MD) or HPV DNA chip assay. Variables associated with having residual or margin positive results after repeat LEEP were analyzed.

결과: The median age was 40 years (range, 20-75). Of 324 patients evaluated, 68 patients (20.9%) were LGL (low grade lesion: CIN 1~2) groups and 256 patients (79%) were HGL (high grade lesion: CIN3~CIS) group. Thirty seven (11.4%) patients received repeat LEEP procedure due to margin positive pathologic results after the initial procedure. Among these patients, only 6 (1.8%) patients had residual lesion according to the repeated LEEP pathologic results. The initial HPV titer before treatment was positively correlated with residual high grade lesion or margin positivity in the repeat LEEP specimen (r = 0.710, p=0.003). All 6 patients with residual lesion after re-LEEP showed HPV titer greater than 800 RLU (range: 881~2610).

결론: In this study, patients who received repeat LEEP showed negative pathologic findings. Therefore, repeat LEEP may be considered for margin positive patients with high pretreatment HPV viral load.

Clinical implications of high-risk HPV load predicting residual disease after cold knife conization for cervical intraepithelial neoplasia

Tae-Wook Kong*, Jiheum Paek, Suk-Joon Chang, Ki-Hong Chang, Hee-Sug Ryu

아주대학교 의과대학 산부인과학학교실

목적: The aim of this study was to determine whether pre- and post-cold knife conization (CKC) high-risk human papillomavirus (HR-HPV) load can predict residual disease.

방법: We retrospectively reviewed data from 217 patients with cervical intraepithelial neoplasia (CIN) treated by CKC at a single institution. Clinicopathologic variables, including age, pre- and post-CKC HR-HPV load, margin status, and glandular involvement, were evaluated as possible predictors of residual disease. For a HR-HPV load, patients were divided into two groups according to the value of 100, 300, and 1,000 RLU/CO as a cutoff for analysis.

결과: Of 217 patients, 29 (13.4%) had residual disease demonstrated by Pap smear and subsequent loop electrosurgical excision procedure (LEEP) or hysterectomy. In univariate analysis, high post-CKC HR-HPV load (>100 RLU/CO vs. 7.0% [14/201] of patients with a load ≤ 100 RLU/CO, p=0.001) and positive resection margin (30.2% [13/43] vs. 9.2% [16/174], p=0.001) were significant risk factors for the residual disease. Multivariate analysis demonstrated that high post-CKC HR-HPV load >300 RLU/CO (p=0.001) and positive resection margin (p=0.05) were significantly associated with higher risk of residual disease.

결론: Post-CKC HR-HPV load >300 RLU/CO could be a significant risk factor for developing residual disease after CKC. Activation of p27 in caspase 3 dependent mechanism. Our findings suggest that growth suppressive effect of ciglitizone was PPAR independent.