

# Application and Future Perspective of Trichloroacetic acid in the Treatment of Cervical Intraepithelial Neoplasia after Cold Knife Conization

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## Abstract

**Background:** Factors that contribute to development of cervical intraepithelial neoplasia are: age older than 55, and infection with persistent, high risk Human papillomavirus (HPV). If the HPV remains in an episomal nonintegrated state, it results with low grade lesion and if virus becomes integrated into the human genome, high grade lesions and cancer may develop. Low grade lesion is cervical intraepithelial neoplasia and it refers to mildly atypical cellular changes in the lower third of the epithelium. High grade cervical lesions are cervical intraepithelial neoplasia II and III. CIN II refers to moderately atypical cellular changes confined at the basal two thirds of the epithelium and CIN III refers to severely atypical cellular

changes encompassing greater than two thirds of the epithelial thickness. Cold knife conization usually is the treatment of choice for high grade cervical lesions.

**Case report:** We present a case of new creative treatment with 85% trichloroacetic acid, of low grade cervical intraepithelial neoplasia, which was a residual cervical lesion after a cold knife conization performed for high grade cervical intraepithelial neoplasia grade treatment.

**Conclusion:** Single topical use of 85% trichloroacetic acid is an effective treatment for residual persistent cervical intraepithelial neoplasia of low grade, after cold knife conization and provides long term remission and satisfying Human papillomavirus clearance. Thus

85% trichloroacetic acid treatment can directly diminish morbidity and mortality of Human papilloma virus related to precancerous cervical lesions and cervical carcinoma.

**Keywords:** HPV, cervical intraepithelial neoplasia, cervical cancer, trichloroacetic acid, conization, colposcopy