

# Efficacy of Laser Conization for Cervical Intraepithelial Lesions : A Comparison with Cold Knife Conization

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**Abstract:** The treatment for cervical intraepithelial neoplasms as well as for early invasive cervical cancer has become more conservative over the years. The usefulness of the recently developed treatment modality of laser conization was thus evaluated, in comparison to conventional cold knife conization. Uterine cervical conization was performed on 212 patients (YAG laser: 101 patients, cold knife 111 patients) at the department of Obstetrics and Gynecology, Fukuoka University Hospital during the 18-year period from January 1981 to March 1998. The cervical lesions consisted of 87 (41.0%) cases of dysplasia, 87 (41.0%) cases of carcinoma in situ (CIS), and 29 (13.7%) cases of microinvasive carcinoma, and 9 (4.2%) cases of early invasive carcinoma. The average age of the patients were not significantly different between the two groups (YAG laser,  $43.4 \pm 12.1$  years old, and cold knife,  $43.2 \pm 10.1$  years old). The quantity of operative hemorrhaging was significantly smaller in YAG laser-treated group ( $28.3 \pm 44.1$  g) than in the cold knife-treated group ( $149.9 \pm 120.9$  g) ( $p < 0.0001$ ). Moreover, the number of the patients, whose quantity of operative hemorrhage exceed 200 g was smaller (2 patients; 2.0%) in laser treated-group than in that of the cold knife-treated group (30 patients; 27.0%) ( $p < 0.0001$ ). Moreover, the mean operation time in the laser treated group was shorter than that of the cold knife-treated groups (YAG laser;  $32.1 \pm 15.3$  min VS Cold knife;  $38.6 \pm 12.6$  minute) ( $p < 0.001$ ). In conclusion, the YAG laser method was found to be more useful than the conventional cold knife method, for performing cervical conization.

**Key words:** Laser, Conization, Cervical cancer, Cervical intraepithelial neoplasm, Nd: YAG laser