

LEEP for cervical neoplasia recurrence in HIV-positive patients



In HIV-positive patients with high-grade cervical intraepithelial neoplasia (CIN), loop electrosurgical excision procedure (LEEP) could lead to reduced cervical disease recurrence compared with cryotherapy.

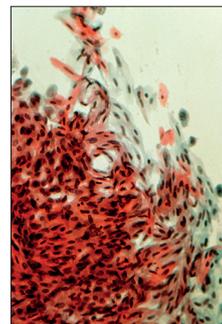
Sharon Greene (University of Washington, Seattle, WA, USA) and colleagues did a randomised, single-centre trial at the Coptic Hope Center for Infectious Diseases in Nairobi, Kenya, to assess the effectiveness of LEEP versus cryotherapy on the incidence of recurrence of cervical neoplasia, in 400 sexually active adult women with HIV positive status and CIN grade 2 or higher. After baseline screening for cervical cancer, the women were randomly assigned (1:1) to undergo LEEP (n=200) or cryotherapy (n=200) and followed up every 6 months for 24 months with a Papanicolaou test and confirmatory biopsy. The primary endpoint was

recurrence of CIN grade 2 or higher, as diagnosed on biopsy, during the 24-month follow-up period.

During the 24-month follow-up, 60 (30%) of 200 patients receiving cryotherapy had recurrence of cervical neoplasia (CIN grade 2+) compared with 37 (19%) of 200 patients receiving LEEP (relative risk 1.71, 95% CI 1.12–2.65; risk difference 7.9%, 95% CI 1.9–14.0; p=0.01). The researchers noted 45 adverse events, mostly low grade, in 40 patients receiving cryotherapy, including pathological changes and death from other causes, whereas 38 adverse events were noted in 30 patients receiving LEEP (mainly pathological changes and unrelated gynaecological complications). The number of reported serious adverse events of grade 3 or worse was 23 in the cryotherapy group versus 11 in the LEEP group.

Study author Michael Chung (University of Washington) said: "For HIV treatment clinics expanding their services to screen for cervical cancer, they may want to invest in training and equipment for LEEP rather than cryotherapy, for more effective results." He explained: "LEEP is used in [low and middle-income countries] but it is more difficult to access than cryotherapy due to the cost of equipment and the need for trained healthcare workers to administer it." Mark Einstein (Rutgers New Jersey Medical School, Newark, NJ, USA) commented: "LEEP is more costly and requires more training and capacity to perform than ablative procedures. As such there needs to be cost-effectiveness and capacity gap analysis, which was not performed in this study."

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For the study by Greene and colleagues see *JAMA* 2019; 322: 1570–79