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Safety of the loop electrosurgical excision procedure performed by clinical officers in an HIV primary care setting

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Synopsis

Outpatient treatment of cervical precancer using LEEP was performed safely and effectively by nonphysician healthcare workers in an HIV primary care clinic in Kisumu, Kenya.

Keywords

Cervical cancer screening; HIV; Loop electrosurgical excision procedure; Kenya

The increasing availability of HIV clinics providing highly active antiretroviral therapy (HAART) has dramatically reduced AIDS-related morbidity and mortality in resource-limited settings. However, the impact of HAART on development and progression of cervical neoplasia and invasive cervical cancer remains uncertain [1]. The longer life expectancy among HIV-infected women receiving HAART may actually increase the overall risk for cervical cancer, underscoring the need for prevention strategies for this high-risk population. A potentially cost-effective way of providing this “primary” care may be through HIV clinics, which are generally well staffed and have more resources than government or private clinics [2]. In addition to utilizing the staffing and infrastructure in place to provide HIV care and HAART, incorporating cervical cancer screening into an HIV clinic visit may increase screening uptake and follow up.

One key element of cervical cancer prevention is the coupling of accurate screening methodologies with safe and effective outpatient treatment for cervical neoplasia. The loop electrosurgical excision procedure (LEEP) has better efficacy among HIV-infected women than cryotherapy [3], and although LEEP requires electricity, it has been used successfully in resource-limited settings [4]. However, LEEP is generally considered a surgical procedure to be performed by physicians or highly-trained midwives. We sought to establish the feasibility and safety of training midlevel HIV primary care providers to perform LEEP in an HIV care

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Conflict of interest

The authors have no conflicts of interest to declare.

and treatment clinic in Kisumu, Kenya. Ethical approval was obtained from all collaborating institutions prior to initiation of screening and treatment.

This evaluation took place at the Family AIDS Care and Education Services (FACES) clinic in Kisumu, Kenya. Kisumu, Kenya's third largest city, has a population of 400 000. FACES partners with the Kenyan Government to provide free HIV care services as per Ministry of Health guidelines. Most visits are done by clinical officers (physician assistants), with medical officers available for consultation. As part of the cervical cancer screening program, all interested clinical officers at FACES were offered LEEP training. Between October 2007 and October 2009, 4 clinical officers underwent training and certification, and performed 181 LEEPs. Women were followed up for complications by telephone at 1 week and during a return visit at 1 month. All women were seen within 6 weeks of LEEP. Five women (3%) had procedure-related complications (Table 1). With the exception of the antibiotics, no additional treatment or referral was required. In our experience, LEEP was performed safely by clinical officers within an HIV-care clinic, expanding potential options for cervical cancer screening programs.

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Table 1

Post-LEEP complications among 5 patients

Patient	Complication	Action taken
Intraoperative		
1	Superficial vaginal laceration	Observation; no sutures needed
Postoperative		
2	Persistent foul-smelling discharge, uterine tenderness	Antibiotics
3	Postcoital bleeding, post-procedure day 2	Minimal bleeding on exam, no treatment indicated. Reinforced post-procedure abstinence.
4	Persistent moderate vaginal bleeding	Exam, no treatment indicated
5	Foul-smelling discharge, no pain or tenderness	No evidence of infection on exam; no treatment indicated