

Title

Loss to follow up after cervical intraepithelial neoplasia after referral to the general practitioner

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Abstract

Objective and rationale

Cervical carcinoma is the fourth most common cancer in women worldwide. It can be prevented by screening followed by either watchful waiting or treatment of precancerous lesions (cervical intraepithelial neoplasia or CIN). Follow-up cytology (Papanicolaou smears) of women with diagnosis of CIN after colposcopy or large loop excision of the transformation zone (LLETZ) is generally performed by gynaecologists, however it might also be performed by the general practitioners (GPs). The latter comes with potential benefits such as lower costs, care closer to home and improvement of the GP's skills and knowledge. Therefore, this study aims to evaluate the efficacy of follow up by the GP.

Methods

A multicentre retrospective cohort study was conducted in two large medical centers. Patients > 18 years with diagnosis of CIN I, II or III after colposcopy or LLETZ with no history of CIN, adenocarcinoma in situ (AIS) or cervical carcinoma were included from the 1st of January 2018 till the 31st of December 2020. The primary outcome was loss to follow-up after 12 and 24 months. Data was collected from electronic patient files and the nationwide network and registry of histo- and cytopathology in the Netherlands (PALGA).

Results

In total 893 patients with follow-up in the hospital and 1708 with follow up at the GP were included. In the LSIL group, 38.1% (333/874) of patients referred to the GP were lost to follow-up at 12 months, compared to 16.6% (92/554) in the hospital group. For HSIL patients, 44.3% (132/298) were lost to follow-up at 24 months with GP referral, versus 24.1% (33/137) with hospital follow-up ($p < 0.001$). Recurrence of LSIL at 12 months was 1.5% for patients with initial LSIL followed up by a general practitioner, compared to 2.8% in the hospital follow-up group. For HSIL, recurrence rates were 6.7% in the GP group and 3.7% in the hospital group. In patients with initial HSIL, recurrence of

LSIL was 0.6% in both the GP and hospital groups, while HSIL recurrence was 0.6% for the GP group and 2.9% for the hospital group. One patient with hospital follow-up developed cervical carcinoma, no cases were observed in the GP follow-up group.

Conclusion

Referral to the general practitioner for follow-up after CIN, where patients must make their own appointments, is associated with nearly twice the rate of loss to follow-up compared to hospital-based follow-up. While recurrence of disease in patients who attended follow-up was low, the short follow-up period limits conclusions. Implementing a reminder system in primary care could help reduce loss to follow-up, optimize care, and improve patient adherence.