

Outcomes of endometrial cancer prevention strategies in patients with Lynch syndrome: a nationwide cohort study in the Netherlands

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Summary

Background: Female Lynch syndrome (LS) carriers have an increased risk of endometrial cancer (EC). Regardless, no uniform, evidence-based gynaecological management guidelines exist for this group. We therefore described its outcomes in the Netherlands.

Methods: For this retrospective cohort study, female LS carriers, prospectively registered in the Dutch LS database (StOET), were included up to February 28th 2022, and linked to the Dutch national pathology (PALGA) database. The number of carriers with/without surveillance, carriers with EC before LS diagnosis (index carriers), uptake of risk-reducing surgery, hyperplasia/EC including characteristics, and requisite for adjuvant therapy were assessed. Overall survival (OS) after EC was analyzed using Kaplan-Meier time to event analyses, cumulative incidence was calculated after adjusting for competing risks (death, prophylactic hysterectomy).

Results: Of 1046 eligible women, 30.0% (n = 313) did not have surveillance, while 21.4% (n = 224) opted for prophylactic hysterectomy. In carriers with surveillance, more cases of EC and hyperplasia were found than in those without (37 EC and 28 hyperplasias versus 14 and 4, respectively); carriers with surveillance were generally younger than those without (median 56 years [IQR 48–65] versus 65 [IQR 49–75] at database assembly, respectively; p < 0.0001). ECs were predominantly of endometrioid type and FIGO IA, regardless of surveillance. Adjuvant external beam radiotherapy was required in one patient in both groups. OS after EC did not differ between carriers with/without surveillance or index carriers (p = 0.51). For all ECs together, cumulative incidence was 22.7% at age 70.

Conclusions: In a nation-wide cohort, nearly one-third of eligible LS did not undergo gynaecological surveillance. ECs diagnosed during surveillance were found in earlier stage, but this did not seem to substantially decrease adjuvant therapy or OS, questioning its effectiveness. Prospective research should further assess this while taking into account patient preferences.