

New Endometrial Cancer Guidelines: A London Trust’s Perspective



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Objective

To determine the local impact of the 2021 update in British Gynaecological Cancer Society guidelines. This guideline lowered the threshold for endometrial thickness (ET) measured on a transvaginal ultrasound requiring further investigation for Endometrial Cancer (EC) to $\geq 4\text{mm}$ from $\geq 5\text{mm}$. Additionally, a new recommendation was for all endometrial cancers to undergo molecular testing including mismatch repair deficiencies, which may lead to an earlier diagnosis of Lynch Syndrome, allowing patients to undergo specialised bowel cancer screening.

We assessed the impact of these guidelines in our trust; how many cancers were diagnosed at the 4mm threshold, and how many women with previously undiagnosed Lynch syndrome were diagnosed as a result of molecular testing.

Lynch syndrome

Lynch syndrome is an autosomal dominant condition characterised by mutations in DNA mismatch repair genes. It is most commonly associated with an increased risk of colorectal cancer, as well as endometrial, ovarian, stomach, small bowel, urinary tract, biliary tract, brain, skin, pancreas and prostate cancer. The lifetime risk for developing colorectal cancer is higher in males (54-74%) compared to females. (30-52%).¹ However, in females, there is also a significant lifetime risk of developing endometrial cancer (28-60%).¹

Earlier diagnosis of Lynch syndrome detected by molecular testing of endometrial cancer patients may be beneficial to help prevent or diagnose colorectal cancer, in this cohort as it allows screening and regular surveillance at an earlier stage.

Design

Retrospective cohort study over one year at a central London trust.

Methods

Patients were identified retrospectively using the Somerset Cancer Register. Any patients diagnosed with endometrial cancer between 1st December 2021 to 31st November 2022 in a west London two-site trust were included.

Electronic patient records were used to access ET, histology, and menopausal status. ET was recorded from both TVS and MRI reports. Histology data collected included type of cancer, molecular testing, mismatch repair (MMR) gene testing, as shown in Figure 1. Clinical notes were reviewed to assess for any diagnosis of Lynch syndrome.

Conclusions

Our results highlight the impact of the new BGCS Guidelines on our local patients. Although extra resources are required to investigate more women, results outline the increased sensitivity for EC, allowing more cancers to be identified at an early stage, and prompt treatment leading to reduced morbidity and mortality, which justifies the necessity for increased resources.

Molecular testing will allow for more specific risk-profiling of EC. The benefits of molecular testing and earlier diagnosis of Lynch Syndrome extend beyond EC, as they allow patients to be enrolled in bowel cancer screening, which facilitates diagnosis of colorectal cancers at an earlier stage, further reducing morbidity and mortality.

MLH1	MSH2
MSH6	PMS2

Figure 1. Panel of MMR genes that may be mutated in Lynch syndrome.

Results

94 patients diagnosed with endometrial cancer in our two-site trust within the time frame. The percentage of patients whose ET was $\leq 5\text{mm}$ was 5.63% (4/72) on TVS and 32.7% (16/49) on MRI.

Of the cohort, 96.8% (91/94) of the patients underwent MMR testing, with 15% (14/91) of these showing MMR deficiency. MMR deficiency was then assessed for Lynch syndrome, with 14% (2/14) testing positive for Lynch syndrome as a new diagnosis, 36% (5/14) negative, and 50% (7/14) currently awaiting results. This process is illustrated in Figure 2.

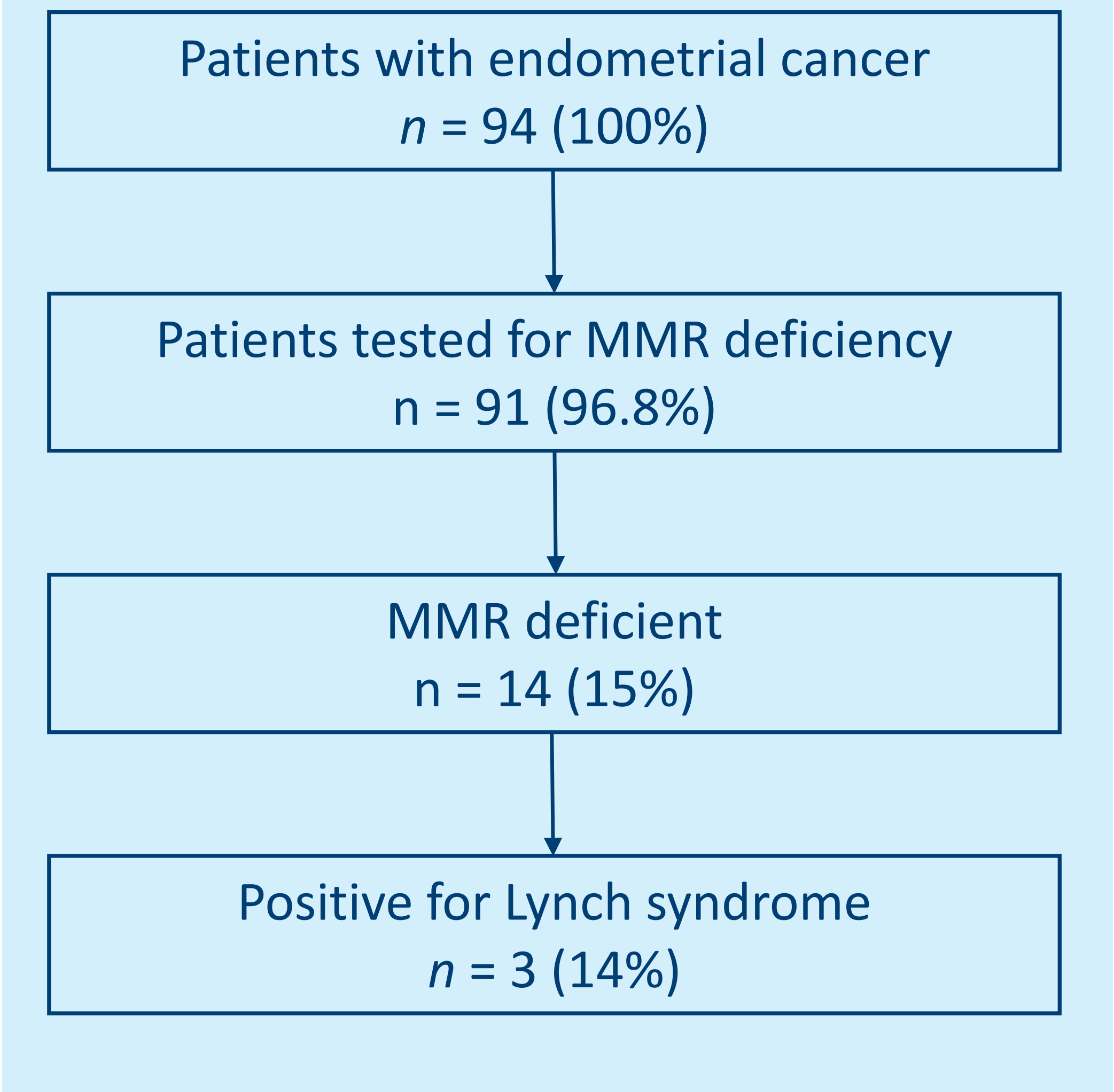


Figure 2. Flowchart illustrating the total number of patients diagnosed with endometrial cancer, who were tested for MMR deficiency and those who were subsequently diagnosed with Lynch syndrome.

References:

1.Schneider R, Schneider C, Jakobeit C, Fürst A, Möslin G. Gender-Specific Aspects of Lynch Syndrome and Familial Adenomatous Polyposis. Viszeralmedizin. 2014;30(2):82-88. doi:10.1159/0003608396/