Poster 27: Levonorgestrel intrauterine device treatment for endometrial intraepithelial neoplasia or endometrial cancer: comparison of patients declining definitive surgery and medically inoperable patients

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Topic
Endometrial

Objectives
The standard of care for the initial treatment of endometrial intraepithelial neoplasia (EIN) and early-stage endometrial cancer (EC) is definitive surgery via hysterectomy. However, patients (pts) who are poor surgical candidates or desire future fertility may be treated with a levonorgestrel intrauterine device (IUD) as a reasonable alternative. Little has been reported about the differences between these two pt groups. This study aims to characterize and compare these two populations of pts.

Methods
A retrospective study of pts with EIN or clinical stage I grade 1 or 2 EC treated with an IUD between 2018-2026 was performed. Complete response (CR) was defined as no hyperplasia or malignancy on pathology and partial response (PR) as a decrease in severity of pathology (ex. EC to EIN). Progression of disease (PD) was defined as a worsening in severity of pathology (ex. EIN to EC). Associations and statistical significance were determined by equal variance two sample t-test, chi-square test, and Fisher's exact test.

Results
In total, 80 pts were included, 53 with severe comorbidities and 24 who desired fertility. About a third of patients (36.3%) underwent definitive management by hysterectomy or radiation, 25% within 12 months of IUD placement. At 12 months, 52.7% had a response (CR or PR). By group, 71.8% of EIN and 35.4% of EC had a response. After response, 9.5% (n=7) experienced relapse of their initial pathology. Fertility pts were more likely to respond by 12 months than severe comorbidity pts, 75% vs 42%, OR 4.14 (CI 1.41-12.19, p=0.0055). Severe comorbidity pts were older, more obese, more frequently exhibited low grade endometrial cancer, and were more frequently lost to follow up than fertility-sparing pts (Table). In all, 13 pts (16.33%) died during the 6-year period, all in the severe comorbidity group.

Conclusions
Outcomes of EIN and EC treated with IUD varied by indication for therapy. Compared with fertility sparing pts, those with severe comorbidities were older and more obese, presented with more advanced initial pathology, and demonstrated significantly lower response rates at 12 months. Although these populations are often evaluated together, they represent clinically distinct groups; separating them may allow for more accurate prognostication and more individualized counseling.

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