

Can It Stay or Must It Go? Extended Use of Intrauterine Devices

CLINICAL QUESTION

How effective and safe are levonorgestrel and copper-T380A intrauterine devices for preventing pregnancy beyond the recommended durations of use?

BOTTOM LINE

If it is not possible or desirable to replace a levonorgestrel 52mg or copper-T380A intrauterine device (IUD) at the end of the approved duration of use, small observational studies demonstrated similar efficacy and safety for up to two additional years, with little evidence afterwards. Guidelines suggest that with patient-informed discussion, deferral of IUD replacement for up to twelve months is reasonable.

EVIDENCE

- One systematic review:¹
 - o Levonorgestrel (LNG) IUD 52 mg (Mirena™): 4 cohort studies, 2089 participants:
 - Health Canada approved duration: 5 years.²
 - Years 6 & 7:
 - 0.02 pregnancies per 100 person-years (95% CI 0–0.29).
 - Expulsion and infection rates: ~0-3%.

- Bleeding/pain leading to discontinuation 0.2 to 6.2%.
- No data on devices with other levonorgestrel dosages.
- Copper-T380A IUD: 2 cohort studies, 473 participants:
 - Health Canada approved duration: 10 years.³
 - Years 11 & 12:
 - No pregnancies reported (95% CI 0–0.8 pregnancies per 100 person-years).
 - Expulsion rate ~1%.
 - No infections or perforations (reported in one study).
 - Bleeding/pain leading to discontinuation 1-5%.
- o An earlier systematic review⁴ found similar results.
- Limitations:
 - No randomized controlled trials were identified. Evidence presented is from relatively small observational studies.
 - o Most studies were in parous participants.

CONTEXT

- Statements from the Society of Obstetricians and Gynecologists of Canada (SOGC) and the American College of Obstetricians and Gynecologists (ACOG) are consistent with these findings.^{5,6}
 - SOGC: "Intrauterine contraception (IUC) may be safely continued beyond its approved duration of use." Removal or replacement may be deferred for up to 12 months.
 - o ACOG: "Data indicate that the copper IUD, [and] the LNG-20 IUD... are all effective beyond their FDA-approved durations of use."
- Average annual rates during first five (LNG) or ten (copper-T380A) years of use⁷:
 - o Pregnancy: ~0.1% (LNG), ~0.4% (copper-T380A).
 - o Expulsion and infection rates: ~0.06-1% (LNG), ~0.02-1.5% (copper-T380A).
 - o Discontinuation due to bleeding or pain: ~7% (LNG), ~3% (copper-T380A).
- IUD cost is ~\$350 (LNG 52mg) or ~\$78 (copper-T380A).8

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Ingrid Baragar, MD, Jessica Kirkwood, MD

CCFP (AM), Allison Paige, MD CCFP, Jen Potter, MD CCFP

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