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What are contraindications to IUDs?

EVIDENCE-BASED ANSWER

Based on limited evidence, use of intrauterine devices (IUDs) is not contraindicated for women with HIV/AIDS (strength of recommendation [SOR]: **C**), multiple sexual partners (SOR: **C**), previous actinomyces colonization (SOR: **C**), most types of fibroids (SOR: **C**), or previous ectopic pregnancy (SOR: **C**).

The risk to IUD users of pelvic inflammatory disease (PID) is similar to women using no contraception (SOR: **B**). Nulliparous women may experience increased insertion discomfort and higher rates of expulsion (SOR: **B**). IUD use of <3.5 years is not associated with decreased fertility (SOR: **B**).

CLINICAL COMMENTARY

IUDs are an excellent choice when estrogens are contraindicated or adherence is an issue

One percent of contraceptive users in the United States choose an IUD, compared with 25% in Europe. This is partly due to misinformation. An older IUD, the Dalkon shield, had a braided polyfilament tail that was associated with a higher risk of PID. People in the US still associate IUDs with this risk.

However, modern IUDs have a monofilament tail, which has not been linked to higher rates of PID. IUDs are an excellent alternative when estrogens are contraindicated, for prevention of pregnancy up to 5 days after unprotected sex, during lactation, and when adherence to a contraceptive has been difficult.

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Evidence summary

IUDs are an effective and safe form of contraception. However, many clinicians have questions about the true contraindications to IUD use in the following situations.

Infection. IUDs do not increase the risk of complications among immunosuppressed HIV-positive women.[1] IUD insertion does not increase the risk of PID for women with gonorrhea or chlamydia infection compared with infected nonusers.[2] In one study, having multiple sexual partners was not associated with an increased risk of PID unless those partners carry specific infections, such as gonorrhea or chlamydia.[3]

In the US, approximately 1 in 1000 women develop PID after IUD insertion.[3] Bacterial vaginosis may increase dysmenorrhea for women with IUDs (34.8 vs 13.9%, *P*=.03).[4] In an observational study, all of 7 women with actinomyces who had IUDs removed remained negative for actinomyces after insertion of a new IUD.[5]

Nulliparity and infertility. Nulliparous women have increased rates of discomfort with IUD placement (17.8% vs 8.8%) and may have an increased risk of expulsion

CONTINUED

TABLE

Contraindications to IUD placement

	ACOG	WHO*	MANUFACTURER
Uterine anomaly (including distension of uterine cavity)	L, C	L, C	L, C
History of PID	L, C (past 3 mo only)	L, C (current PID only for both)	L (if no subsequent pregnancy), C
Postpartum endometritis or septic abortion in the past 3 months	L, C	L, C (immediately post-septic abortion for both)	L, C
Untreated cervicitis/vaginitis, including bacterial vaginosis	L, C	L, C (not bacterial vaginosis)	L, C (including genital actinomycosis)
Multiple sexual partners		L, C (increased STI risk is a relative contraindication for both)	L, C
Immunosuppression		L, C (AIDS is a contraindication for both, unless clinically well on antiretroviral therapy)	L, C

* Includes conditions rated as level 3 (risks usually outweigh benefits) or 4 (represents an unacceptable health risk) by WHO

L, levonorgestrel (Mirena) IUD; C, Copper T 380 (Paragard) IUD; IUD, intrauterine device; ACOG, American College of Obstetricians and Gynecologists; WHO, World Health Organization; PID, pelvic inflammatory disease; STI, sexually transmitted infection

FAST TRACK

Significant uterine enlargement can increase the risk of IUD expulsion

(up to 18.5% in one study, compared with less than 5.7% for all IUD users).[6] Short-term (≤3.5 years) IUD use by nulliparous women was not associated with decreased fertility in a case-control study;[7] however, 1 cohort study demonstrated lower fertility with use of a copper IUD for longer periods: hazard ratio (HR): 0.69 (95% confidence interval [CI], 0.497–0.97) for 42–78 months; HR=0.50 (95% CI, 0.34–0.73) for >78 months.[8]

Uterine anomalies. Significant uterine enlargement can increase the risk of IUD expulsion (0 vs 4 women [13%]; *P*=.04 in 1 retrospective cohort study).[9] There are case reports of IUD failure and uterine perforation among women with anomalies that distort the uterine cavity.[10,11]

Other. Some contraindications to IUD use, such as concurrent pregnancy, are obvious. Other common sense contraindications might include insertion by patients with recent postpartum endometritis, gynecologic malignancy, genital bleeding of unknown cause, and gestational trophoblastic disease.

Recommendations from others

Manufacturer product labeling lists a number of contraindications. The American College of Obstetrics and Gynecology and the World Health Organization have similar but generally less restrictive lists of contraindications to IUD placement (**TABLE**).

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