“Long-Acting Reversible Contraceptives: Intrauterine Devices and the Contraceptive Implant”
Eve Espey, MD, MPH, and Tony Ogburn, MD
Click Here to Read the Full Article

Questions written by:
Iris Romero, MD
Department of Obstetrics and Gynecology
University of Chicago
Chicago, Illinois

Responses written by:
Eve Espey, MD, MPH
Tony Ogburn, MD
Department of Obstetrics and Gynecology
University of New Mexico
Albuquerque, New Mexico

1. Since long-acting reversible contraceptive methods are the most cost-effective contraceptives after 2 to 3 years of use, should providers preferentially use other contraceptives in women who are not sure they want to wait at least 2 years until their next pregnancy?

Response from Drs. Eve Espey and Tony Ogburn:
We provide a long-acting reversible contraceptive method to almost any woman who requests it. Factors other than cost-effectiveness—acceptability, tolerance of side effects, noncontraceptive benefits, contraindications to other methods—are equally as important in determining the best method for a given woman. In addition, we have found that many women change their minds over time and decide to delay conception longer than initially planned.

2. Some patients are not willing to use any method of contraception that may act as an abortifacient. How do you counsel your patients regarding the mechanism of action of the intrauterine device (IUD) in this regard? If an IUD is not an abortifacient, why is the proportion of ectopic pregnancies higher for women who conceived while using an IUD?

Response from Drs. Eve Espey and Tony Ogburn:
As defined by the scientific community, pregnancy begins with successful implantation. An abortifacient disrupts an established, or implanted, pregnancy. The IUD works primarily as a spermicide, inhibiting sperm migration and viability. If fertilization does occur, the IUD may alter the endometrial lining, preventing implantation. The IUD does not appear to prevent implantation in the tube, accounting for the higher likelihood of an extraterine pregnancy in
the event of method failure. If a patient inquires about the mechanism of action of the IUD or specifically expresses a concern that the IUD is an abortifacient, we discuss what is known about the mechanism of action of the IUD. It should be noted that many forms of contraception, including oral contraceptive pills, may prevent implantation in some cycles.

3. What is the recent experience with medical liability and IUDs? What are the key factors, including patient selection, for reducing those risks?

Response from Drs. Eve Espey and Tony Ogburn:
Litigation involving current IUDs is rare. Following recent U.S. Food and Drug Administration (FDA) and evidence-based guidelines for patient selection is prudent. Additionally, we strongly encourage following the insertion guidelines included in the IUD package inserts: Perform a bimanual examination, use a tenaculum, and sound the uterus prior to placement of the IUD. Following these steps may minimize the risk of perforation as well as provide legal protection in the event of uterine perforation. As with any procedure, informed consent, including a thorough discussion of possible complications and failure rates, should be obtained and documented.

4. Is the likelihood of uterine perforation or expulsion higher when inserting an IUD in a nulliparous adolescent? Wouldn’t using depot medroxyprogesterone acetate (DMPA) or an etonogestrel implant in this setting achieve the same contraceptive goal without the potential complications?

Response from Drs. Eve Espey and Tony Ogburn:
There is no evidence that perforation rates in nulliparous adolescents are higher than in multiparous older women. The advantages of IUDs, especially the levonorgestrel intrauterine system, may provide outstanding forgettable contraception to adolescents, as well as other benefits such as decreased menstrual cramping and bleeding. These advantages may be difficult to achieve with other methods. Although the implant is forgettable and has outstanding effectiveness, it has a relatively high rate of irregular bleeding that may be troubling to teens. DMPA has low satisfaction and continuation rates due to side effects such as weight gain and irregular bleeding, and has the inconvenience of an every-3-month dosing schedule. We offer all options to our nulliparous and multiparous teenage patients but encourage the use of either an implant or an IUD.
5. When treating menorrhagia, what are the advantages of a levonorgestrel intrauterine system over an office endometrial ablation?

Response from Drs. Eve Espey and Tony Ogburn:
These two methods have similar success in treating menorrhagia. In most instances the levonorgestrel intrauterine system is less expensive than the global ablation techniques. Additionally, the intrauterine system provides reliable contraception and is reversible in the event a woman desires future fertility.

6. Given that patients who become pregnant with an IUD in place are at a significantly increased risk of having an ectopic pregnancy, should IUDs be avoided in patients with a history of ectopic pregnancy?

Response from Drs. Eve Espey and Tony Ogburn:
No. An IUD lowers the absolute risk of ectopic pregnancy, even in patients with a previous ectopic pregnancy, because the method is so effective. Both the World Health Organization Medical Eligibility Criteria and the U.S. Medical Eligibility Criteria give a Category 1 rating for use of an IUD in a woman with a prior ectopic pregnancy.

7. Given the high rate of disrupted bleeding patterns with the etonogestrel implant, in what clinical situations do you think the implant would be a better option than an IUD?

Response from Drs. Eve Espey and Tony Ogburn:
The bleeding disruptions associated with the implant often improve after several months of use and are often acceptable to the patient. Irregular bleeding does not necessarily equate with dissatisfaction with the method. We tend to avoid recommending the implant in patients who are already troubled by irregular bleeding. The implant may be the preferred method for women with a contraindication to the IUD such as uterine malformation, active cervical disease, or recent or current pelvic infection.
8. Do immunocompromised patients (for example, those with human immunodeficiency virus [HIV], poorly controlled diabetes, or chronic glucocorticoid use) have an increased risk of infection at the time of IUD insertion? If so, is there a role for prophylactic antibiotics to decrease this risk?

Response from Drs. Espey and Ogburn:
Immunocompromised patients do not appear to have a higher risk of infection at the time of IUD insertion. The U.S. Medical Eligibility Criteria give a Category 2 rating for IUD initiation and continuation in women infected with HIV but not with full-blown acquired immunodeficiency virus (AIDS). In women with AIDS, a Category 2 rating is given to continuation and a Category 3 to initiation, largely because of lack of data. Limited evidence suggests that IUD use does not increase the risk of infectious complications or increase the risk of transmission to a partner. IUD use in women with diabetes receives a Category 1 rating for the copper IUD and a Category 2 rating for the levonorgestrel-releasing intrauterine system. In general, prophylactic antibiotics do not appear to be warranted in populations with relatively low prevalence of sexually transmitted infections (STIs).

9. When during the postpartum period is the ideal time to insert an IUD in order to reduce the risks of perforation and expulsion? Are these risks increased if the patient is breastfeeding?

Response from Drs. Eve Espey and Tony Ogburn:
The IUD may be inserted immediately (ideally within 10 minutes) after delivery of the placenta. Although postplacental insertion is associated with a higher expulsion rate than interval insertion, this disadvantage may be offset by the increased number of women who obtain the IUD. In our institution, prior to initiation of postplacental IUD insertion, a retrospective study showed that at most 60% of our postpartum patients who desired an IUD at the time of discharge actually received one by 3 months postpartum. No-shows for the postpartum appointment, loss of insurance, and lack of an available provider were barriers to interval IUD insertion. Interval insertion should occur at least 4 weeks postpartum as there may be a slightly higher risk of perforation if performed earlier. It is unclear whether the risk of perforation is increased in breastfeeding compared with nonbreastfeeding women.
10. Etonogestrel interacts with other drugs such as antibiotics and HIV and seizure medications. Do any of these interactions constitute contraindications to its use?

Response from Drs. Eve Espey and Tony Ogburn:
Most drug interactions with etonogestrel are theoretical with regard to potential effect on contraceptive efficacy. Short-term medications, such as a course of antibiotics for an acute infection, do not pose a risk of decreased efficacy. With chronic medications such as HIV or seizure medications, the risk of decreased efficacy or other adverse outcomes is unknown. We often encourage IUD use in women with chronic diseases who are on multiple medications.

11. Would you advise against placing an IUD in a patient with cervical dysplasia? If not, how does the evaluation and treatment of dysplasia differ for a woman using an IUD?

Response from Drs. Eve Espey and Tony Ogburn:
IUDs can be used in patients with cervical dysplasia. Pap tests, human papillomavirus testing, and colposcopy with biopsies and/or endocervical curettage can be performed in patients with an IUD. If loop electrosurgical excision procedure (LEEP) is necessary, the IUD can be retained during the procedure. We typically move the strings to alternate sides and obtain the LEEP specimen in two pieces. Another option is to perform the LEEP in standard fashion, simply cutting the IUD strings in the process. When, in the future, the woman desires removal of the IUD, an alligator forceps designed for IUD removal may be used to extract the IUD in the office, usually with minimal discomfort.