Use of Guideline-Based Antibiotic Prophylaxis in Women Undergoing Gynecologic Surgery

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(Obstet Gynecol 2013;122:1145–53)

1. Review the current guidelines for antibiotic prophylaxis for hysterectomy from the American College of Obstetricians and Gynecologists (Practice Bulletin 104: Antibiotic Prophylaxis for Gynecologic Procedures). What antibiotics do you administer to your patients who are undergoing hysterectomy? How is this similar or dissimilar to current guidelines? What changes, if any, should you make to your current practice?

2. Make a list of what time point(s) the appropriate administration and discontinuation of antibiotics is reviewed in women going to the operating room. Are there multiple “checks” in your system to ensure the proper administration of antibiotics or no antibiotics? In the editorial that accompanies this article (Obstet Gynecol 2013;122:1143–4), Dr. Dowdy discusses the importance of the entire operative team to ensure better compliance with guidelines and allowing all members of the “team” to voice concerns. Is this the current practice at your institution? How are other team members educated regarding current recommendations regarding antibiotic administration, and how are they encouraged to voice concerns?

3. The authors discuss the difference between high-volume and low-volume surgeons’ application of guidelines. What did the authors define as high-volume surgeons? What did they define as low-volume surgeons? Discuss why low-volume surgeons may have performed less well as compared to high-volume surgeons. Are there strategies that low-volume surgeons might employ to increase compliance with guidelines?

4. While the appropriate use of antibiotics increased from 2002 to 2012, the inappropriate administration of antibiotics also increased over the same time period. Discuss whether or not antibiotics are given at your institution for the myomectomy, open and laparoscopic oophorectomy with or without salpingectomy, open and laparoscopic ovarian cystectomy, dilation and curettage with or without hysteroscopy, and laparoscopic tubal ligation. What steps could your practice take in order to decrease the administration of inappropriate antibiotics?

5. The authors acknowledge that occasionally there may be indications for nonadherence to current guidelines. Discuss clinical scenarios for hysterectomy where antibiotic prophylaxis might be contraindicated, as well as clinical scenarios where antibiotics, although not generally recommended, might be clinically indicated.

6. The authors have used a large database in which some outcomes have been validated and state “The database has been validated and used in a large number of outcomes studies.” What does validation of the database mean? Why is this important in evaluating the conclusions of this paper?

7. Discuss antibiotic prophylaxis for the following case scenarios:
   b. A 50-year-old G3P3 morbidly obese woman (BMI of 52) with known abdominal adhesive disease undergoing laparoscopic salpingectomy.
   c. A 22-year-old G1P0 undergoing a dilation and curettage for a missed abortion.
   d. A 55-year-old G3P3 with a history of Clostridium difficile colitis undergoing total laparoscopic hysterectomy.
   e. A 45-year-old G0 with a large myomatous uterus who was given antibiotics prior to the beginning of her hysterectomy who has now lost 700 mL of blood.