“Effect of Progestin Compared With Combined Oral Contraceptive Pills on Lactation: A Randomized Controlled Trial”
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1. Review the physiology of lactation. In particular, discuss the roles of prolactin, estrogen, and progesterone in onset and maintenance of lactation. Review the current and historical uses of drugs for initiating and terminating lactation.

2. Note that there is no clinical trials registration for this study. Review the rationale for the requirement for registration of clinical trials by reading Dr. Scott’s editorial (Obstet Gynecol 2004;104:1218–9) and Dr. Abaid’s commentary (Obstet Gynecol 2007;109:1434–7). Discuss whether the absence of registration affects the strength of the study.

3. In the Introduction the authors pose the question of whether combined oral contraceptive pills diminish the quantity or quality of breast milk in a clinically meaningful way. Discuss whether the authors have chosen the best primary and secondary outcomes to answer their question. Would any other outcomes have been better?

4. Should there have been a third treatment arm employing nonhormonal contraception? Why or why not?

5. The authors randomly assigned treatment in blocks of 6. What is the purpose of blocking in a double-masked randomized controlled trial? What are the disadvantages of blocking? Does block size matter?

6. Review the sample size calculation. Why was a difference in breastfeeding continuation of 25% used for this study? In general, how does one select differences between treatment groups for sample size calculation? If you had designed this study, what difference in breastfeeding continuation rates would you have used for sample size calculation?

7. Discuss the formulations of contraceptives used in this study. How do they compare with the formulation you typically prescribe? Is there reason to believe that you would get a better breastfeeding continuation rate with your choice? A better contraceptive continuation rate with your choice?

8. Calculate the rate of loss to follow-up for each group. What methods did the authors use to minimize loss to follow-up? What is an acceptable rate of loss to follow-up in randomized clinical trials? Discuss the basis for your answer.


10. When in the postpartum period do you initiate combined oral contraceptive pills for a breastfeeding woman? Is the information in this paper applicable to your practice?