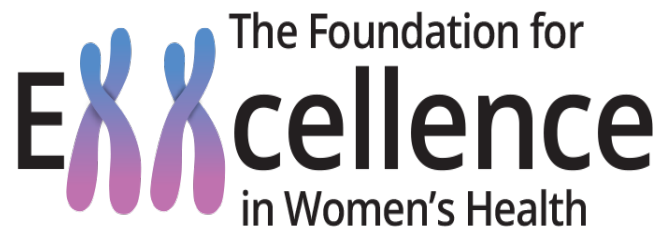


# L<sup>3</sup>-ObGyn™

*for*

## **OB/GYN Residents**



### **2015-2016 - BOOK 4**

Please visit our website under  
Programs of Excellence for  
**PEARLS OF EXCELLENCE**

to review the most challenging topics from the oral certification exams.

# June 2016

USE OF LIFE-LONG LEARNING (L<sup>3</sup>-ObGyn™) PROGRAM  
REFERENCE BOOK

*The Foundation for Excellence in Women's Health (Foundation) has prepared this reference book to introduce residents and their Program Director to the concept and importance of "life-long learning." The references included have been selected to provide residents with new, recent or review material to supplement their didactic foundation in the practice of obstetrics and gynecology. The inclusion of a reference does not constitute acceptance or endorsement by the Foundation or any individual employed by or associated with it, of any opinions expressed or of the accuracy of the data or case studies included therein.*

THE FOUNDATION FOR EXCELLENCE IN WOMEN'S HEALTH  
L<sup>3</sup>-ObGyn™  
Ob/Gyn Residents  
June 2016 Reading Assignment List

<b>Office Practice</b>	<b>Question Numbers</b>
<i>Geisler WM, Uniyal A, Lee JY, et al: Azithromycin versus doxycycline for urogenital Chlamydia trachomatis infection, N Engl J Med 2015(Dec);373(26):2512-21</i>	1-6
<i>Lee AW, Ness RB, Roman LD, et al: Association between menopausal estrogen-only therapy and ovarian carcinoma risk, Obstet Gynecol 2016(May);127(5):828-36</i>	7-10
<i>Schliep KC, Mitchell EM, Mumford SL, et al: Trying to conceive after an early pregnancy loss: an assessment on how long couples should wait, Obstet Gynecol 2016(Feb);127(2):204-12</i>	11-16
<b>Gynecology</b>	
<b>2 Articles:</b> <i>Trabuco EC, Moorman PG, Algeciras-Schimmich A, et al: Association of ovary-sparing hysterectomy with ovarian reserve, Obstet Gynecol 2016(May);127(5):819-27 AND Hansen KA: Accelerated menopause with ovary-sparing hysterectomy? Obstet Gynecol 2016(May);127(5):817-8</i>	17-21
<i>Hodis HN, Mack WJ, Henderson VW, et al: Vascular effects of early versus late postmenopausal treatment with estradiol, N Engl J Med 2016(Mar);374(13):1221-31</i>	22-26
<i>Power L, Lefas G, Lambert P, et al: Hormone use after nonserous epithelial ovarian cancer: overall and disease-free survival, Obstet Gynecol 2016(May);127(5):837-47</i>	27-30
<b>Obstetrics</b>	
<i>Mehrabadi A, Dahhou M, Joseph KS, Kramer MS: Investigation of a rise in obstetric acute renal failure in the United States, 1999-2011, Obstet Gynecol 2016(May);127(5):899-906</i>	31-36
<i>Roberge S, Demers S, Girard M, et al: Impact of uterine closure on residual myometrial thickness after cesarean: a randomized controlled trial, Am J Obstet Gynecol 2016(Apr);214(4):507.e1-6</i>	37-42
<i>ACOG Prac Bull No. 163: Screening for fetal aneuploidy, Obstet Gynecol 2016(May);127(5):e123-37</i>	43-48

# THE FOUNDATION FOR EXCELLENCE IN WOMEN'S HEALTH

## L<sup>3</sup>-ObGyn™

Directions: Each of the questions or incomplete statements below is followed by suggested answers or completions. Select the ONE THAT IS BEST in each case and then blacken the corresponding space on the answer sheet. IF CHOICE "D or E" CONTAINS DASHES ONLY, DO NOT CHOOSE IT AS AN ANSWER.

### L<sup>3</sup>-ObGyn™ — Office Practice

Geisler WM, Uniyal A, Lee JY, et al: Azithromycin versus doxycycline for urogenital Chlamydia trachomatis infection, N Engl J Med 2015(Dec);373(26):2512-21

1. Which of the following is **TRUE** regarding a phase 3 trial?
  - A. treatments tested for safety, efficacy, and dosage on healthy volunteers
  - B. treatments tested for efficacy on groups of patients in multicenter trials
  - C. treatments tested post-marketing for benefits and risks
  - D. treatments tested for safety, efficacy, and toxicity on patients with the targeted conditions
  - E. ---
2. Which of the following was considered indicative of new infection rather than treatment failure?
  - A. insufficient number of ompA copies on genotyping
  - B. discordant chlamydia strains on genotyping
  - C. unsupervised furloughs between enrollment and follow-up
  - D. self-report of sexual activity between enrollment and follow-up
  - E. ---
3. Which of the following is **TRUE** regarding the primary analyses?
  - A. All participants were included as per an intention to treat approach.
  - B. Participants who dropped out or withdrew were included.
  - C. Participants who vomited within 1 hour of treatment were included.
  - D. Participants who completed therapy and had treatment failure established were included.
  - E. ---
4. If the power calculation indicated that only 153 participants were needed in each study arm (or 306 total), why did the authors recruit 567 participants?
5. Randomization ideally assures similar demographics between the different treatment arms. On which of the following demographics were the treatment arms statistically significantly different?
  - A. gender
  - B. median age
  - C. previous chlamydia infection
  - D. median age of first sexual activity
  - E. race
6. The authors conclude 'the noninferiority of azithromycin to doxycycline for the treatment of chlamydia infection was not established.' Given this conclusion, should we be prescribing a seven-day doxycycline regimen rather than a 1 g single dose azithromycin regimen, to patients with chlamydia infection?

7. This paper represents which of the following levels of scientific evidence?
- A. I
  - B. II
  - C. III
  - D. IV
  - E. V
8. Women with which of the following conditions were excluded from the study?
- A. non-melanoma skin cancer
  - B. bilateral oophorectomy
  - C. simple hysterectomy
  - D. oral contraceptive use
  - E. ---
9. How many different sensitivity analyses were performed?
- A. 1
  - B. 2
  - C. 3
  - D. 4
  - E. 5
10. Compared with women in the control group, and across all histotypes and duration and timing categories, which of the following women did estrogen-only therapy appear to have the strongest association with risk of ovarian carcinoma?
- A. current or recent users, using for 1 to less than 5 years, with endometrioid
  - B. current or recent users, using for 10 or more years, with endometrioid
  - C. current or recent users, using for 1 to less than 5 years, with serous
  - D. current or recent users, using for 10 or more years, with serous
  - E. past users, using for 10 or more years, with serous

Schliep KC, Mitchell EM, Mumford SL, et al: Trying to conceive after an early pregnancy loss: an assessment on how long couples should wait, *Obstet Gynecol* 2016(Feb);127(2):204-12

11. Which of the following was a primary outcome of this study?
- A. inter-trying interval
  - B. inter-pregnancy interval
  - C. pregnancy detected by hCG
  - D. pregnancy loss
  - E. pregnancy complication
12. Which of the following best describes the study hypothesis?
- A. couples don't need to wait after pregnancy loss to conceive
  - B. couples should wait at least 3 months after pregnancy loss to conceive
  - C. couples will have greater reproductive success if they conceive more than 3 months after pregnancy loss
  - D. couples will not experience a difference in reproductive success based on inter-trying interval
  - E. ---

13. Time to pregnancy was defined as which of the following?
- A. pregnancy loss to attempting conception
  - B. attempting conception to positive hCG
  - C. positive hCG to liveborn delivery
  - D. pregnancy loss to positive hCG
  - E. ---
14. Which of the following was **NOT** considered as a potential confounder?
- A. education
  - B. smoking
  - C. physical activity
  - D. treatment
  - E. age
15. In the performed sensitivity analyses, women with a 0-3 month inter-trying interval compared to those with a greater than 3-month interval had which of the following?
- A. shorter time to pregnancy
  - B. similar time to live birth
  - C. no difference in time to pregnancy
  - D. no difference in time to live birth
  - E. ---
16. Would you use the data presented in this study to counsel patients on conception attempts following a pregnancy loss? What would you say?

### L<sup>3</sup>-ObGyn™ — Gynecology

**2 Articles:** Trabuco EC, Moorman PG, Algeciras-Schimmich A, et al: Association of ovary-sparing hysterectomy with ovarian reserve, *Obstet Gynecol* 2016(May);127(5):819-27 **AND** Hansen KA: Accelerated menopause with ovary-sparing hysterectomy? *Obstet Gynecol* 2016(May);127(5):817-8

17. The serum samples assayed for antimüllerian hormone concentrations were part of the Prospective Research on Ovarian Function (PROOF) cohort study which was funded by which of the following?
- A. a pharmaceutical company
  - B. the National Institute on Aging
  - C. the National Institute of Child Health Development
  - D. the Mayo Foundation
  - E. ---
18. Which of the following tests for ovarian reserve is **LEAST** influenced by the stage of the patient's menstrual cycle?
- A. antimüllerian hormone level
  - B. FSH and estradiol level
  - C. antral follicle count
  - D. inhibin B
  - E. ---

19. This study used only a subset of patients from the PROOF cohort study. To minimize bias from known or possible confounders for early menopause, they excluded women for which of the following except:
- A. history of smoking
  - B. no prior pregnancies
  - C. irregular menstrual cycles
  - D. history of autoimmune disease
  - E. ---
20. Baseline antimüllerian hormone levels were similar between the control group and those who underwent ovary-sparing hysterectomy. Interestingly, however, there was undetectable antimüllerian hormone in 4.7% of the study group and in what percent in the control group?
- A. 2.2%
  - B. 4.6%
  - C. 6.2%
  - D. 13.4%
  - E. ---
21. Do you think that informed consent for patients undergoing planned ovary-sparing hysterectomy should include a discussion about the possibility of accelerated menopause?

*Hodis HN, Mack WJ, Henderson VW, et al: Vascular effects of early versus late postmenopausal treatment with estradiol, N Engl J Med 2016(Mar);374(13):1221-31*

22. This study randomized women to placebo vs oral 17  $\beta$ -estradiol with or without micronized progesterone vaginal gel depending on whether they had a uterus or not. In contrast, in the Women's Health Initiative Study (WHI), women were randomized to either placebo or Premphase or Prempro depending on the presence of a uterus. Which of the following is the best way to describe the type of estrogen-progesterone therapy for patients with a uterus in this study?
- A. sequential progesterone therapy
  - B. continuous combined estrogen and progesterone therapy
  - C. pulsed progesterone therapy
  - D. ---
  - E. ---
23. The "timing hypothesis" for the initiation of postmenopausal hormonal therapy on atherosclerosis and coronary heart disease suggests that the effect of estrogen is different depending on the initiation of hormonal therapy relative to the
- A. onset of menopause
  - B. extent of coronary-artery calcium by computed tomography
  - C. first appearance of carotid-artery intimal media thickening from baseline
  - D. start of early clinical symptoms of atherosclerosis
  - E. ---

24. As expected with randomization, the baseline characteristics of patients did not differ significantly between participants in the early and late postmenopausal groups, with the exception of which variable in the late postmenopausal group?
- A. type of surgical menopause
  - B. smoking history
  - C. age at enrollment
  - D. use of antihypertension medications
  - E. ---
25. In the early-postmenopausal group, what was shown to be significantly different in the estradiol treatment group compared to the placebo group?
- A. decreased rate of CIMT progression and CT measured coronary atherosclerosis
  - B. decreased rate of CIMT progression and increase in CT measured coronary atherosclerosis
  - C. decreased rate of CIMT progression only
  - D. decreased rate of CT measured coronary atherosclerosis only
  - E. ---
26. This study adds to the scientific evidence that the early initiation of postmenopausal estrogen therapy may be beneficial for
- A. prevention of atherosclerotic cardiovascular disease
  - B. treatment of established coronary-artery disease
  - C. both A and B
  - D. neither A and B
  - E. ---

*Power L, Lefas G, Lambert P, et al: Hormone use after nonserous epithelial ovarian cancer: overall and disease-free survival, Obstet Gynecol 2016(May);127(5):837-47*

27. Among women in both cohorts, <age 55 and  $\geq 55$ , which of the following baseline characteristics was associated with a more likely chance of being treated with hormonal therapy?
- A. type of treatment
  - B. age at treatment
  - C. grade of cancer
  - D. BMI
  - E. ---
28. Significantly more women were prescribed hormonal therapy based on
- A. higher income
  - B. treatment prior to 2002
  - C. FIGO stage I-II cancer
  - D. surgical treatment
  - E. ---
29. In women younger than age 55 that were treated with hormonal therapy, disease-free survival was improved in
- A. univariable analysis only
  - B. multivariable analysis only
  - C. both univariable and multivariable analysis
  - D. neither analysis
  - E. ---



30. A strength of the analysis of hormone therapy use and length of use was that drug use data was captured by means of
- A. chart review
  - B. telephone interviews
  - C. use of drug information network database
  - D. electronic medical record
  - E. ---

### L<sup>3</sup>-ObGyn™ — Obstetrics

Mehrabadi A, Dahhou M, Joseph KS, Kramer MS: Investigation of a rise in obstetric acute renal failure in the United States, 1999-2011, *Obstet Gynecol* 2016(May);127(5):899-906

31. The authors hypothesized a priori that what change listed below could account for the increase in obstetric acute renal failure in the USA?
- A. increased incidence of hypertensive disorders
  - B. increase in severe postpartum hemorrhage
  - C. increase in NSAID use for pain relief
  - D. none of the above
  - E. ---
32. The authors defined severe postpartum hemorrhage as postpartum hemorrhage in conjunction with which of the following?
- A. need for blood transfusion
  - B. hysterectomy
  - C. surgical repair of the uterus
  - D. all of the above
  - E. ---
33. The proportion of patients with acute renal failure and which factor listed below increased during the second half of the study period compared to the first half?
- A. those who required dialysis
  - B. those who died
  - C. those who had chronic kidney disease
  - D. none of the above
  - E. ---
34. The small rise in acute renal failure with dialysis was due to which of the following?
- A. preeclampsia
  - B. chronic kidney disease
  - C. chronic hypertension
  - D. both B and C
  - E. ---
35. Contrary to the authors' a priori hypothesis, what factor did they determine after their study best explained the increase in acute renal failure in the United States?
- A. increased ascertainment
  - B. diabetes
  - C. preeclampsia
  - D. chronic hypertension
  - E. ---

36. How would you manage a woman with acute renal failure who you diagnose with “atypical hemolytic uremic syndrome”? (Hint: See the case report in the same issue of *Obstetrics & Gynecology*.)

Roberge S, Demers S, Girard M, et al: Impact of uterine closure on residual myometrial thickness after cesarean: a randomized controlled trial, *Am J Obstet Gynecol* 2016(Apr);214(4):507.e1-6

37. For which of the following issues related to the method of closing the uterine incision after cesarean delivery do the authors (from their literature review) conclude that at present there is no consensus?

- A. one-versus two-layer closure
- B. locking versus nonlocking of the first layer
- C. decidua included versus excluded
- D. all of the above
- E. ---

38. The authors randomized 81 women to allow for a 10% risk of loss to follow-up. How many women were actually lost to follow-up?

- A. 1
- B. 2
- C. 5
- D. 8
- E. ---

39. Which method of closure, although referenced (#11), was **NOT** studied by the authors?

- A. single layer nonlocking
- B. single layer locked
- C. double layer, locked first layer
- D. double layer, unlocked
- E. ---

40. In considering all cases of primary cesarean delivery, what was a major limitation of this study?

- A. failure to consider the impact of prior vaginal birth
- B. low frequency of closing parietal peritoneum
- C. excluding women in advanced labor
- D. failure to specify the type of suture used for closing the myometrium
- E. ---

41. Which method of uterine closure produced the lowest residual myometrial thickness (the primary outcome in this study)?

- A. single layer locked
- B. double layer locked
- C. double layer unlocked
- D. there was no significant difference in residual myometrial thickness among the three methods
- E. ---

42. Based on the estimated incidence of uterine rupture in a trial of labor after one previous C-section (0.7%), how many women would have to be enrolled in a study to show which method of uterine closure had the lowest risk of uterine rupture during a subsequent TOLAC?

Note: Accretas and scar ectopic pregnancies are even less frequent than uterine rupture.

43. What is the approximate incidence of chromosomal abnormalities among live births?
- A. 2-3%
  - B. 1/150
  - C. 1/800
  - D. none of the above
  - E. ---
44. When is the best time to perform a quad screen?
- A. 10-13<sup>6/7</sup> weeks
  - B. 15-22<sup>6/7</sup> weeks
  - C. 16-18 weeks
  - D. none of the above
  - E. ---
45. Which of the following is an important limitation of integrated screening?
- A. low detection rate
  - B. does not screen for open fetal defects
  - C. high rates of nonadherence (patients do not return for their quad screen)
  - D. all of the above
  - E. ---
46. Which of the "soft markers" listed below has the highest risk of aneuploidy?
- A. isolated nuchal skinfold thickness
  - B. isolated echogenic intracardiac focus
  - C. isolated choroid plexus cyst
  - D. isolated renal pelvis dilation
  - E. ---
47. Which of the following statements is **TRUE**?
- A. The fetal component of cell-free DNA comprises 1-2% of the total cell-free DNA in the maternal blood.
  - B. Cell-free DNA cannot be used to identify the presence of a Rh-positive fetus in a Rh-negative mother.
  - C. Cell-free DNA screening tests for microdeletions have been validated.
  - D. Cell-free DNA screening tests do not provide information regarding the potential for open fetal defects.
  - E. ---
48. The Practice Bulletin states "Typically, monozygotic twins will have the same karyotype." Can you find case reports in the literature for each of the major aneuploidies (Trisomy 21, 18, 13) where there was discordance in monozygous twin karyotypes?

**THE NEXT BOOK WILL BE PUBLISHED ON OUR WEB SITE  
IN SEPTEMBER 2016**