L^3-ObGyn™

for

OB/GYN Residents

The Foundation for Exxcellence in Women's Health

2016-2017 - BOOK 2

Please visit our website under
Programs of Exxcellence for
PEARLS OF EXXCELLENCE

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

November 2016

2915 Vine Street, Dallas, Texas 75204
http://www.exxcellence.org

USE OF LIFE-LONG LEARNING (L^3-ObGyn™) PROGRAM
REFERENCE BOOK

The Foundation for Exxcellence 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 EXXCELLENCE IN WOMEN'S HEALTH
L[3]-ObGyn™
Ob/Gyn Residents
November 2016 Reading Assignment List

Office Practice	**Question Numbers**
Chen ZJ, Shi Y, Sun Y, et al: Fresh versus frozen embryos for infertility in the polycystic ovary syndrome, N Engl J Med 2016(Aug);375(6):523-33	*1-5*
Clark LH, Staley SA, Barber EL, et al: The effect of distance traveled on disease outcomes in gestational trophoblastic neoplasia, Am J Obstet Gynecol 2016(Aug);215(2):217.e1-5	*6-12*
Lauring JR, Lehman EB, Deimling TA, et al: Combined hormonal contraception use in reproductive-age women with contraindications to estrogen use, Am J Obstet Gynecol 2016(Sep);215(3):330.e1-7	*13-18*
Gynecology	
Perkins RB, Morgan JR, Awosogba TP, et al: Gynecologic outcomes after hysteroscopic and laparoscopic sterilization procedures, Obstet Gynecol 2016(Oct);128(4):843-52	*19-22*
Barnhart KT, Guo W, Cary MS, et al: Differences in serum human chorionic gonadotropin rise in early pregnancy by race and value at presentation, Obstet Gynecol 2016(Sep);128(3):504-11	*23-26*
Osborne RJ, Filiaci VL, Schink JC, et al: Second curettage for low-risk nonmetastatic gestational trophoblastic neoplasia, Obstet Gynecol 2016(Sep);128(3):535-42	*27-30*
Obstetrics	
Two Articles: *D'Alton ME, Friedman AM, Smiley RM, et al: National partnership for maternal safety: Consensus bundle on venous thromboembolism, Obstet Gynecol 2016(Oct);128(4):688-98* **AND** *Sibai BM, Rouse DJ: Pharmacologic thromboprophylaxis in obstetrics: Broader use demands better data, Obstet Gynecol 2016(Oct);128(4):681-84*	*31-36*
Two Articles: *Berghella V, Saccone G: Fetal fibronectin testing for prevention of preterm birth in singleton pregnancies with threatened preterm labor: A systematic review and metaanalysis of randomized controlled trials, Am J Obstet Gynecol 2016(Oct);215(4):431-8* **AND** *Macones GA: Fetal fibronectin testing in threatened preterm labor: Time to stop, Am J Obstet Gynecol 2016(Oct);215(4):405*	*37-42*
Two Articles: *Tita AT, Szychowski JM, Boggess K, et al: Adjunctive azithromycin prophylaxis for cesarean delivery, N Engl J Med 2016(Sep);375(13):1231-41* **AND** *Weinstein RA, Boyer KM: Antibiotic prophylaxis for cesarean delivery – When broader is better, N Engl J Med 2016(Sep);375(13):1284-6*	*43-48*

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 "E or F" CONTAINS DASHES ONLY, DO NOT CHOOSE IT AS AN ANSWER.

L^3-ObGyn™ — Office Practice

Chen ZJ, Shi Y, Sun Y, et al: Fresh versus frozen embryos for infertility in the polycystic ovary syndrome, N Engl J Med 2016(Aug);375(6):523-33

1. *According to Table 1, for which of the following baseline characteristics was there a significant difference between the frozen-embryo versus fresh-embryo transfer groups?*

   A. diastolic blood pressure
   B. rate of previous conception
   C. polycystic ovaries
   D. total testosterone
   E. 2-hour glucose value

2. *According to Table 3, what was the frequency of clinical pregnancies in the frozen-embryo transfer group?*

   A. 438
   B. 58.7%
   C. 428
   D. 56.2%
   E. 2.5 (-2.4 to 7.5)
   F. 1.05 (0.96 to 1.14)

3. *Which of the following is* **TRUE** *of the frozen-embryo group compared to the fresh-embryo group?*

   A. lower frequency of live births
   B. lower incidence of moderate to severe ovarian hyperstimulation syndrome
   C. lower rates of singleton live births
   D. lower incidence of preeclampsia
   E. ---

4. *What does the following statement mean? 'The results of post-hoc as treated and per-protocol analyses were consistent with the results of the intention-to-treat analysis.*

5. *Which of the following is a recommended end point for infertility trials?*

   A. number of days of ovarian stimulation
   B. number of oocytes retried
   C. number of embryos transferred
   D. live birth rate
   E. ---

Clark LH, Staley SA, Barber EL, et al: The effect of distance traveled on disease outcomes in gestational trophoblastic neoplasia, Am J Obstet Gynecol 2016(Aug);215(2):217.e1-5

6. *The secondary outcome of this study was classified in which of the following ways?*

   A. WHO score <7 vs ≥7
   B. FIGO 2000 staging I/II vs III/IV
   C. clinical recurrence based on serum hCG levels
   D. biopsy-proven metastatic disease
   E. A and B
   F. C and D

7. *The secondary exposure of interest in this study was which of the following?*

   A. disease burden at presentation
   B. disease recurrence
   C. distance travelled to obtain care
   D. insurance status
   E. ---

8. *Which of the following statistical tests was used to determine significance for bivariable comparisons of non-parametric variables?*

   A. Student t test
   B. Wilcoxon rank sum
   C. X_2
   D. Fisher exact
   E. logistic regression

9. *The long-distance group, compared to the short-distance group, had increased risk of which of the following outcomes?*

   A. presentation at advanced stage
   B. recurrence risk
   C. multi-agent chemotherapy
   D. WHO low-risk disease
   E. FIGO stage III/IV

10. *Insurance status was associated with which of the following?*

    A. presentation with high-risk disease
    B. presentation with advanced stage disease
    C. recurrence risk
    D. none of the above
    E. all of the above

11. *In what ways can delays to care be associated with distance from care or distance travelled?*

12. *The power of this study was calculated based on an assumption that women traveling more than 50 miles to obtain care would have a 3-fold increased risk of presenting with high risk GTN (60%) from a baseline of 20%. What were the actual ratios and how does this affect the power calculation?*

Lauring JR, Lehman EB, Deimling TA, et al: Combined hormonal contraception use in reproductive-age women with contraindications to estrogen use, Am J Obstet Gynecol 2016(Sep);215(3):330.e1-7

13. *According to the World Health Organization's Medical Eligibility Criteria for Contraceptive Use, 'theoretical or proven risks usually outweigh the advantages for using the method' corresponds with which of the following categories?*

    A. 1
    B. 2
    C. 3
    D. 4
    E. ---

14. *The hypothesis of the study was that women with category 3 or 4 contraindications to estrogen-containing contraception would be less likely to use combined hormonal contraception than women without a medical contraindication. Based on the data, should the authors accept or reject their hypothesis? What data supports this?*

15. *What statistical test contributed to your conclusion in question 14 above?*

    A. X^2
    B. Fisher exact
    C. Student t-test
    D. Wilcoxon rank sum
    E. odds ratio

16. *What was the only difference in characteristics between reproductive-age women with and without contraindications to combined-hormonal contraception use?*

    A. current CHC use
    B. nonwhite race
    C. education
    D. income
    E. BMI

17. *If a study participant indicated that they were currently using combined hormonal contraception, how was it determined whether it was progestin-only versus combined pills?*

    A. survey
    B. follow-up phone conversation
    C. chart abstraction
    D. pharmacy claims data
    E. not specified

18. *The authors made a point to say that "not all 18 category 3 and 4 health conditions were ascertained by the survey, so if women in the sample had other category 3 and 4 contraindications. . .they may have been misclassified." What are the potential effects of this misclassification bias on the magnitude and interpretation of the results?*

Perkins RB, Morgan JR, Awosogba TP, et al: Gynecologic outcomes after hysteroscopic and laparoscopic sterilization procedures, Obstet Gynecol 2016(Oct);128(4):843-52

19. *This retrospective cohort study mined data from the Truven Health Analytics MarketScan Commercial Claims Database. How many women were in this Database?*

    A. 525,000
    B. 1.6 million
    C. 2.7 million
    D. 62.5 million
    E. ---

20. *The authors wanted to avoid categorizing pregnancies that were inadvertently present at the time of the sterilization procedure as a "failure of sterilization." Therefore, pregnancy codes for first trimester diagnoses were considered valid only if they occurred how long after hysteroscopic or laparoscopic sterilization?*

    A. 2 weeks
    B. 3 weeks
    C. 4 weeks
    D. 6 weeks
    E. ---

21. *Among the 27,724 hysteroscopic sterilizations, there were 722 pregnancies, for a method failure rate of 2.6%. The failure rate, however, was only 1.8% among the women who had completed their post procedure hysterosalpingogram. How many total pregnancies were in this group?*

    A. 221
    B. 361
    C. 421
    D. 561
    E. ---

22. *One of the strengths of this study was the large data set. Which of the following is a limitation of this study?*

    A. inability to ascertain whether women had pelvic pain prior to sterilization
    B. data not generalizable to entire United States
    C. population limited to women with commercial insurance
    D. A and C
    E. none of the above

Barnhart KT, Guo W, Cary MS, et al: Differences in serum human chorionic gonadotropin rise in early pregnancy by race and value at presentation, Obstet Gynecol 2016(Sep);128(3):504-11

23. *The authors previous research (Reference #10 2004) found that the minimal hCG rise for a viable intrauterine pregnancy was 53% in 48 hours. They discuss that the data in that study was limited by a relatively homogenous racial and ethnic population and which other limiting factor?*

    A. exclusion of women with uncertain LMP
    B. included only women who had follow-up at 48 hour intervals
    C. enrollment of patients in multiple different hospitals
    D. inclusion of women with pregnancy of uncertain location
    E. ---

24. *Serial hCG curves showed statistically significant variation for all of the following variables* **EXCEPT***:*

    A. African American race
    B. presence of pain at presentation
    C. history of prior ectopic pregnancy
    D. maternal age older than 34 years at presentation
    E. ---

25. *The minimal rise of hCG over two days for viable intrauterine pregnancies varied significantly with the initial hCG level. The minimal rise when the hCG level was >3,000 milli-international units/mL was*

    A. 66%
    B. 53%
    C. 38%
    D. 33%
    E. ---

26. *In the discussion, the authors call to question the concept of a discriminatory zone. If one is used, however, they offer the suggestion to use what hCG level?*

    A. 1,200
    B. 1,500
    C. 2,000
    D. 3,000
    E. 5,000

Osborne RJ, Filiaci VL, Schink JC, et al: Second curettage for low-risk nonmetastatic gestational trophoblastic neoplasia, Obstet Gynecol 2016(Sep);128(3):535-42

27. *This cooperative group multicenter prospective phase II study was funded by an NIH Grant under the guidance of which collaborative research group?*

    A. World Health Organization
    B. Society of Gynecologic Oncologists of Canada
    C. Gynecologic Oncology Group (GOG)
    D. New England Trophoblastic Disease Center
    E. ---

28. *The present study found that which of the following factors predicted success of second curettage for surgical cure?*

    A. patient's age
    B. WHO risk score
    C. entry hCG level
    D. ultrasound findings
    E. none of the above

29. *In patients whose WHO risk score was 4 or less, the surgical cure rate was 43.6%. What was the percent cure in patients with a WHO risk score of 5 or 6?*

    A. 0%
    B. 12%
    C. 22%
    D. 39%
    E. ---

30. *Which of the following was* **NOT** *an exclusion criteria for entry into this trial?*

    A. pretreatment diagnosis of partial mole
    B. initial registration hCG level <20 milli-international units/mL
    C. prior chemotherapy
    D. positive chest x-ray
    E. ---

L^3-ObGyn™ — Obstetrics

Two Articles: *D'Alton ME, Friedman AM, Smiley RM, et al: National partnership for maternal safety: Consensus bundle on venous thromboembolism, Obstet Gynecol 2016(Oct);128(4):688-98* **AND** *Sibai BM, Rouse DJ: Pharmacologic thromboprophylaxis in obstetrics: Broader use demands better data, Obstet Gynecol 2016(Oct);128(4):681-84*

31. *According to the most recent update from the CDC by Creanga and colleagues, what percent of all pregnancy-related deaths in the USA are attributable to thrombotic pulmonary embolism?*

    A. 4.8
    B. 9.3
    C. 14.9
    D. 31.1
    E. ---

32. *Which of the following is a risk factor for venous thromboembolism?*

    A. obesity
    B. advanced maternal age
    C. major medical comorbidities
    D. all of the above
    E. ---

33. *Which of the following is a low-risk thrombophilia?*

    A. protein C deficiency
    B. compound heterozygote for factor V Leiden and prothrombin gene mutation
    C. antithrombin III deficiency
    D. factor V Leiden homozygosity
    E. ---

34. *What is the recommended minimum interval between the last dose of prophylactic low-molecular-weight heparin and initiation of neuraxial anesthesia?*

    A. 6 hours
    B. 12 hours
    C. 24 hours
    D. no minimum interval for prophylaxis only
    E. ---

35. *If pharmacologic prophylaxis with low-molecular-weight heparin for four days was administered to one million women after cesarean delivery (to prevent one maternal death), what would be the absolute minimum cost?*

    A. $5 million
    B. $25 million
    C. $52 million
    D. $130 million
    E. ---

36. *Each of the articles selected for L3 for obstetrics in November 2016 has an accompanying editorial.*

    A. *How would you classify this editorial-supportive, neutral or oppositional? (Try the same exercise for the other two articles and editorials)*

    B. *List some factors that you think contribute to a worthwhile editorial.*

Two Articles: *Berghella V, Saccone G: Fetal fibronectin testing for prevention of preterm birth in singleton pregnancies with threatened preterm labor: A systematic review and metaanalysis of randomized controlled trials, Am J Obstet Gynecol 2016(Oct);215(4):431-8* **AND** *Macones GA: Fetal fibronectin testing in threatened preterm labor: Time to stop, Am J Obstet Gynecol 2016(Oct);215(4):405*

37. *What cells are the major producers of fetal fibronectin?*

    A. *amniocytes*
    B. *cytotrophoblasts*
    C. *type III pneumocytes*
    D. *A & B*
    E. *---*

38. *What was the primary outcome of this systematic review?*

    A. *incidence of preterm birth at <37 weeks*
    B. *incidence of preterm birth at <34 weeks*
    C. *incidence of preterm birth at <32 weeks*
    D. *incidence of preterm birth at <28 weeks*
    E. *---*

39. *How many of the six studies included in this review did not report a definition of preterm labor?*

    A. *0*
    B. *1*
    C. *2*
    D. *3*
    E. *---*

40. *Comparing the results of this systematic review to a Cochrane review published in 2008, what do the authors identify as an important difference?*

    A. *The Cochrane review concluded that there was evidence to support the continued use of fibronectin testing whereas the current review did not.*
    B. *The Cochrane review was limited to women with threatened preterm labor.*
    C. *This systematic review was limited to women with threatened preterm labor.*
    D. *None of the above.*
    E. *---*

41. *In women with threatened preterm labor in the Peaceman report, what accounted for the higher than 99% negative predictive value of fetal fibronectin testing?*

    A. a low rate of false positives
    B. high sensitivity
    C. 73-87% of the women were likely not in preterm labor by the accepted definition of preterm labor
    D. all of the above
    E. ---

42. *List some reasons why it takes so long to discontinue a practice (fetal fibronectin testing, for example) that, in the words of Dr. Macones, "cannot be justified."*

Two Articles: *Tita AT, Szychowski JM, Boggess K, et al: Adjunctive azithromycin prophylaxis for cesarean delivery, N Engl J Med 2016(Sep);375(13):1231-41* **AND** *Weinstein RA, Boyer KM: Antibiotic prophylaxis for cesarean delivery – When broader is better, N Engl J Med 2016(Sep);375(13):1284-6*

43. *According to the authors, what percent of women undergoing nonelective cesarean delivery develop a postoperative infection despite standard preincision prophylaxis?*

    A. 3.8%
    B. 6.1%
    C. up to 12%
    D. more than 15%
    E. ---

44. *Which of the following patients were eligible for inclusion in this clinical trial?*

    A. patients with chorioamnionitis
    B. patients whose fetuses had known major congenital anomalies
    C. patients receiving antibiotics for Group B streptococcus
    D. none of the above
    E. ---

45. *Which of the following statements is* **TRUE** *regarding the addition of 500 mg of I.V. azithromycin to standard prophylaxis compared to standard prophylaxis alone in this trial?*

    A. Endometritis was significantly reduced in the azithromycin group.
    B. Wound infections were significantly more frequent in the standard treatment–only group.
    C. The number needed to treat to prevent one primary outcome was 17.
    D. All of the above.
    E. ---

46. *Among the more than 17,000 women screened for eligibility, what was the most common reason to be excluded from the study?*

    A. underwent vaginal delivery
    B. did not provide consent
    C. underwent an elective cesarean delivery
    D. declined to participate
    E. ---

47. *According to earlier studies, which of the organisms listed below significantly increased the risk of postpartum endometritis and wound infection?*

    A. Legionella species
    B. Chlamydia
    C. Gardnerella
    D. Ureaplasma
    E. ---

48. *The authors of the editorial questioned whether higher doses of cefazolin in women with increased BMI should be evaluated before the addition of a second agent. Can you locate (Hint: AJOG) a recent study where higher doses of cefazolin were used for obese women undergoing cesarean delivery?*

THE NEXT BOOK WILL BE <u>PUBLISHED</u> ON OUR WEB SITE IN MARCH 2017