

THE ROLE OF NAF CYTOLOGY IN BREAST-CANCER RISK SCREENING

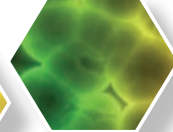
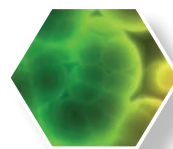
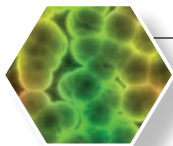
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Learning objectives approved and CE questions prepared by Masih Shokrani, PhD, MT(ASCP), Clinical Laboratory Sciences Program, College of Health and Human Sciences, Northern Illinois University, DeKalb, IL.

1. **Other than skin cancer, which of the following is the most common type of cancer for women in the United States?**
 - a. Colon cancer.
 - b. Breast cancer.
 - c. Stomach cancer.
 - d. Lymphoma.
2. **About 50% to 70% of women who develop breast cancer have no identifiable risk factors, other than age.**
 - a. TRUE
 - b. FALSE
3. **The following help(s) in identification of atypical epithelial cells associated with an increased risk of developing breast cancer.**
 - a. Fine-needle aspiration.
 - b. Nipple-aspirate fluid (NAF).
 - c. Both a and b.
 - d. Neither a nor b.
4. **Which of the following is(are) listed as the disadvantage(s) of mammograms?**
 - a. They are not very effective in women with dense breasts.
 - b. They are not useful in patients who have a significant risk of developing breast cancer in the future.
 - c. They are not very helpful if the goal is breast-cancer prevention.
 - d. All of the above.
5. **Atypia in nipple-aspirate fluid has a prospective relationship with increased breast-cancer risk.**
 - a. TRUE
 - b. FALSE
6. **Which of the following are a risk biomarkers for breast cancer?**
 - a. Serum levels of estradiol and testosterone in postmenopausal women.
 - b. Insulin-like growth-factor binding protein.
 - c. Mammographic breast density.
 - d. All of the above.
7. **The following statements relate to what was suggested by Dr. Papanicolaou:**
 - a. The Pap technique could be used to detect carcinoma in the preclinical stage.
 - b. Cytological examination should be performed in every case of spontaneous discharge.
 - c. Both a and b.
 - d. Neither a nor b.
8. **Most invasive breast cancers do not begin from precancerous lesions of ductal epithelial cells that are part of the branching series of ductal-lobular units within the breast.**
 - a. TRUE
 - b. FALSE
9. **Which of the following statements is(are) true of NAF?**
 - a. Hormones affect the ability to produce NAF.
 - b. "Non yielders" for NAF have the lowest risk of developing breast cancer.
 - c. Both a and b.
 - d. Neither a nor b.
10. **Ductal lavage is not a practical option for risk screening for the breast cancer because**
 - a. clinicians must complete a specialty training program to perform the procedure.
 - b. pathologists must be certified to evaluate and report results.
 - c. FDA clearance limits its use to women already known to be at high risk.
 - d. All of the above.
11. **The following is(are) the advantage(s) of cytological examination of NAF:**
 - a. Does not require special certification.
 - b. Results are reported in just five categories focused on atypia presence or absence.
 - c. Most labs can evaluate and report NAF status after brief training.
 - d. All of the above.
12. **NAF evaluation, using an automated system, is suited for premenopausal, asymptomatic women ages 25-55.**
 - a. TRUE
 - b. FALSE



13. The following are indicated in the handling samples of NAF prior submission to the pathology laboratory:
- Samples are collected with a non-cell-binding swab as part of the collection kit for the automated device.
 - The swab is placed directly into a non-gyn liquid-based cytology fixative vial for the transport to the lab.
 - Both a and b.
 - Neither a nor b.
14. According to the "field effect," a woman with atypia in one breast has a nearly equal chance of developing breast cancer in either breast.
- TRUE
 - FALSE
15. In the slide screening and interpretation for NAF, the "normal" samples are the samples that
- have normal epithelium.
 - are acellular.
 - show hyperplasia.
 - All of the above.
16. In the reporting of NAF results, abnormal findings that indicate a significantly increased risk are
- atypia.
 - suspicious for malignancy.
 - Both a and b.
 - Neither a nor b.
17. Reason(s) for reporting NAF results through a standardized classification system
- include classification system reduces complication in physician reports.
 - because results can be communicated clearly and unambiguously.
 - because it helps labs and other providers to compile statistical reports more easily.
 - All of the above.
18. Normal ductal epithelial cells are classified in Category III in the classification system for reporting NAF results.
- TRUE
 - FALSE
19. Cells suspicious for malignancy are classified in which category in the classification system for reporting NAF results?
- Category I.
 - Category II.
 - Category III.
 - Category IV.
20. Cells that are negative for atypical or malignant cells are in which category in the classification system for reporting NAF results?
- Category 0.
 - Category I.
 - Category II.
 - Category III.

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CE Test on THE ROLE OF NAF CYTOLOGY IN

BREAST-CANCER RISK SCREENING March 2009

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Circles must be filled in, or test will not be graded.

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