A Review of Articles From Last Month’s Archives of Pathology & Laboratory Medicine

Listed below are questions based on articles that appeared in last month’s edition of the ARCHIVES. Registered continuing medical education participants should answer these questions either online or use the March 2008 answer sheet.

1. Which of the following statements concerning hypersensitivity pneumonitis (HSP) is false?
   a. the use of corticosteroids in treating HSP (acute farmer’s lung) was shown to improve long-term outcome in one randomized, placebo-controlled trial
   b. the clinical course of HSP is highly variable in general, and acute forms of HSP do not necessarily evolve into a chronic form of the disease
   c. bronchoalveolar lavage findings in HSP reflect antigen exposure only and can be influenced by how recent the antigen exposure has been
   d. a diagnosis of HSP cannot be definitively confirmed with any single laboratory or radiographic test
   e. in subacute HSP, radiographic findings may be nonspecific reticulonodular patterns with small nodular opacities and ground glass opacities
   (from Hypersensitivity Pneumonitis—Madison)

2. The histologic grading of 51 bladder biopsy cases by 5 pathologists revealed that there was a unanimous agreement by all the pathologists in 30 (59%) of the cases.
   True or False?
   (from Survivin as a Useful Adjunct Marker for the Grading of Papillary Urothelial Carcinoma—Chen et al)

3. A review of practices associated with tests sent to reference facilities (“send-out” tests) at 97 clinical laboratories determined which of the following statements below is true?
   a. 94.5% of the send-out test requests were correctly ordered into a laboratory information system
   b. participants at the median institution reported a specimen misrouting rate of 1.3%
   c. order entry errors tended to be lower when a miscellaneous test code was used than when a specific test code was used
   d. a reduction in order entry errors was reported when all send-out tests were released from a core laboratory or a specialized send-out area
   e. order entry staff at the bottom fourth of laboratories made order entry errors on 4% of send-out tests
   (from Accuracy of Send-Out Test Ordering—Valenstein et al)

4. In a recent study, pairwise analysis of formalin-fixed and unfixed HER2 controls identified antigen retrieval as the cause of HER2 laboratory testing failure in approximately 35% of failures, reagents or staining protocol as the cause in 20% of failures, and a combination of the two causes in 45% of failures.
   True or False?
   (from National HER2 Proficiency Test Results Using Standardized Quantitative Controls—Vani et al)

5. When discussing fixatives used in anatomic pathology, which of the following statements is false?
   a. the cross-linking action of formalin results in DNA that is more susceptible to structural damage and fragmentation during extraction
   b. fixatives such as picric acid, mercury-containing solutions, and acid decalcifiers may not be compatible with molecular testing
   c. the length of time that tissue is fixed does not impact on the quality of the DNA
   d. the average fragment length of DNA obtained from formalin-fixed, paraffin-embedded tissues is often only between 300 and 400 base pairs
   e. the quantitation of RNA from differentially expressed genes may be greatly altered in fixed tissue as compared with parallel fresh tissue
   (from Molecular Pathology in Anatomic Pathology Practice—Hunt)

6. Because the majority of endocervical adenocarcinoma in situ and invasive adenocarcinoma cases fail to express p16, this marker is rarely used to distinguish endocervical glandular neoplasia from benign conditions.
   True or False?
   (from Immunohistochemistry in Gynecologic Pathology—Deavers)