Self-Assessment Quiz

The questions in this self-assessment quiz are based on the articles in this issue of the journal. Each of the questions or statements is followed by five possible answers or completions. Select all of the correct answers to each of the questions and circle the corresponding letters. The answers appear on the inside front cover of this issue.

As an organization accredited for continuing medical education, the American Academy of Pediatrics certifies that this continuing medical education activity, when used and completed as directed, meets the criteria for two hours of credit in Category I of the Physician’s Recognition Award of the American Medical Association and two hours of PREP credit.

To earn two hours of Category I credit and two hours of PREP credit, you must be registered for PREP or subscribing to PEDIATRICS IN REVIEW. You have received a three-ring binder which contains a set of IBM computer cards and return envelopes. There are no monthly deadlines for the return of the computer cards, except that all cards must be returned by June 30, 1985 to ensure proper credit. Be sure that the date on the computer card corresponds with the date on each issue. Please do not write over the date or the ID number of the card.

We invite you to write specific comments about the relevance of each of the articles and any other comments you wish to make about the Journal on the back of each card.

1. Acute, in contrast to chronic, bleeding in a newborn is more likely to be associated with:
   A. Pallor.
   B. Gasping respirations.
   C. Low venous pressure.
   D. Signs of congestive heart failure.
   E. Hydrops.

2. Laboratory findings suggestive of fetomaternal bleeding include:
   A. Positive findings on Kleihauer-Betke acid elution test on maternal blood.
   B. Elevated level of maternal adult hemoglobin.
   C. Elevated level of r-fetoprotein in maternal serum.
   D. Low level of serum ferritin in infant.
   E. Cord blood reticulocyte count of 6%.

3. An apparently healthy, full-term, 3.5-kg, 24-hour-old male infant develops mild pallor and jaundice. The pregnancy and delivery were uneventful. Laboratory findings were: hemoglobin 12 g/dL, WBC count 14,000/µL, platelet count 225,000/µL, total bilirubin 8 mg/dL (direct fraction 0.5 mg/dL). Peripheral blood smear showed some Howell-Jolly bodies, spherocytes, nucleated RBCs, and a marked polychromatophilia. The single most likely diagnosis is:
   A. Acute blood loss.
   B. Internal blood loss (enclosed hemorrhage).
   C. Chronic blood loss.
   D. Hemolytic anemia.
   E. Sepsis.

4. Reasonable options in the treatment of a neonate with anemia, secondary to chronic blood loss, and congestive heart failure include:
   A. Transfusion of whole blood.
   B. Partial exchange transfusion.
   C. Blood infusion rate of 10 mL/kg/h.
   D. Transfusion of blood with a high fetal hemoglobin level.
   E. Furosemide followed by transfusion of packed RBCs.

5. Which one of the following statements pertaining to the incidence of chromosomal abnormalities is not true:
   A. They are present in 5% to 6% of perinatal and pediatric autopsies.
   B. They are present in 10% of all clinically recognizable spontaneous abortions.
   C. Down syndrome occurs in about 1/700 live-born infants.
   D. They involve approximately 1/250 newborns.
   E. "Balanced" rearrangements occur in about 1/500 newborns.

6. True statements about chromosomal abnormalities include:
   A. If nondisjunction occurs after the first mitotic division, the result will be a mosaic.
   B. Of every four zygotes with trisomy 21, three will survive to term.
   C. Congenital malformations and/or mental retardation are invariably found in unbalanced translocations.
   D. Incidence of trisomy 21 increases with increasing maternal age, rising more rapidly after 35 years of age.
   E. In mosacism, the percentage of lymphocytes or skin fibroblasts affected is always the same as the percentage in gonadal cells.

7. If breaks occur in two chromosomes and there is a transfer of segments between the chromosomes, both rearranged chromosomes being retained in the cell, that cell is considered to have a (single response):
   A. Balanced translocation.
   B. Deletion.
   C. Inversion.
   D. Unbalanced translocation.
   E. Nondisjunction.

8. A 22-year-old gravida 1 para 1 whose newborn has Down syndrome asks about her chances of having another similarly affected (live-born) child. The family history is negative for any congenital malformations. Which one of the following statements pertaining to her situation is not true:
   A. If the parent’s karyotypes are normal, and the child has a translocation, the recurrence risk is probably about the same as the maternal age-related risk.
   B. If either parent is a carrier of a balanced translocation, phenotypically normal offspring have about a 50% risk of carrying a balanced translocation.
   C. If either parent has a 21/21 translocation, the recurrence risk is 100%.
   D. There is about a 25% probability that her child has a translocation trisomy 21.
   E. If this child has a trisomy 21-Down syndrome, the recurrence risk is about 1% to 2%.

9. Audiometric frequencies that are most critical for the perception of speech are between (single response):
   A. 500 to 2,000 Hz.
   B. 2,000 to 3,000 Hz.
   C. 3,000 to 4,000 Hz.
   D. 4,000 to 5,500 Hz.
   E. 5,500 to 8,000 Hz.

10. Factors that identify infants "at risk" for hearing impairment include:
    A. Certain congenital infections.
    B. Family history of childhood hearing impairment.
    C. Birth weight <2.500 g.
    D. Congenital anatomic malformations involving the head and neck.
    E. Haemophilus influenzae meningitis.

11. Factors that account for the delay in recognizing and referring children who are hearing impaired include:
    A. There are shortcomings in current neonatal screening programs.
    B. Physicians are reluctant to refer for evaluation.
    C. Child's physician is usually the first to suspect the hearing loss.
    D. Delayed speech development is often the first indication to draw attention to underlying hearing loss.
    E. Most sensorineural hearing losses are acquired after birth.

12. A 30-month-old child should be referred for an audiologic assessment/communication evaluation if he/she has:
    A. Six-month delay in expressive communication.
    B. Single-word vocabulary of 50 words.
    C. No two-word combinations.
    D. No use of telegraphic sentences.
    E. Clarity of only 50% of words.