Penicillin Update — Goldstein, Kaplan, Feigin

Normal Speech and Language Development: An Overview — Coplan

Acute Renal Failure: Diagnosis — Sehic, Chesney

Formulas for the Healthy Term Infant — Greer


**CONTENTS**

**ARTICLES**

83  **Penicillin Update**  
*Stuart L. Goldstein, Sheldon L. Kaplan, Ralph D. Feigin*

91  **Normal Speech and Language Development: An Overview**  
*James Coplan*

101  **Acute Renal Failure: Diagnosis**  
*Azra Sehic, Russell W. Chesney*

107  **Formulas for the Healthy Term Infant**  
*Frank R. Greer*

114  **Consultation with the Specialist: Ataxia**  
*Catherine DeAngelis*

117  **Index of Suspicion**  
*John L. Green, Randy Cron, Laurette Ho, Bradley Bradford*

**IN BRIEF**

115  **Craniosynostosis**

**COVER**

Working in the medium of batik, Paul Nzalamba creates images that are drawn from his native country, Uganda, and that reflect the strength, struggle, and beauty of all people, especially children and adolescents. We chose to use his “At Play” (1988) to show a modern, indigenous artist’s work that illustrates the color and joy of such artists. Mr. Nzalamba’s works are on display at his studio in Los Angeles, California. Reproduced with permission.

**ANSWER KEY**


PIR QUIZ

1. Jeff is a 4-year-old male who attends nursery school. One of the children in his school became ill at school 2 days ago, but the cause of his illness has not yet been determined. Jeff was well until about 12 hours ago, when he developed a high fever and chills. He appears acutely ill, is febrile, and you detect a scattered petechial rash. His cerebrospinal fluid is cloudy. You suspect he has meningococcemia. Your immediate treatment would be:
   A. Aqueous penicillin G IV
   B. Benzathine penicillin G IM
   C. Methicillin IM
   D. Penicillin VK PO
   E. Procaine penicillin G IV

2. Baby Marie is a newborn female who weighed 5 lb at birth. Her mother’s membranes had ruptured prematurely, 36 hours before delivery. The baby is now 72 hours old. The nurses report that she has been sucking poorly and has developed icterus. Blood cultures have been drawn, and her umbilical stump has been cultured. Pending the results of these cultures, you would order administration of:
   A. Ampicillin IM
   B. Carbenicillin IM
   C. Cloxacillin PO
   D. Methicillin IV
   E. Nafcillin IV

3. Mike is a 4-year-old male who has a history of recurrent otitis media. He has responded well to previous antibiotic treatment and has not had any adverse reaction to antibiotic therapy. In view of these recurrent episodes, you would now order:
   A. Amoxicillin PO
   B. Benzathine penicillin IM
   C. Penicillin G PO
   D. Penicillin VK PO
   E. Ticarcillin/clavulanic acid PO

4. Lorraine is a 12-year-old female who has cystic fibrosis. She has some coughing spells, mostly at night. Her problems with mucus have seemed to respond well to oral iodides. She attends school and is doing well. Two days ago, her cough became worse and she developed an intermittent fever. Your initial treatment would be:
   A. Amoxicillin PO
   B. Benzathine penicillin IM
   C. Procaine penicillin IM
   D. Ticarcillin/clavulanic acid PO
   E. Vancomycin IV
remain dependent on a mechanical output device of some kind, which may range from a simple picture board to a microcomputer that has speech capabilities.

REFERENCES
ulation abnormalities accompanied by an increase in bleeding time secondary to the platelet dysfunction are found in severe uremia.

Proteinuria of more than 1 g/d, numerous dysmorphic red blood cells, and red blood cell and granular casts are seen in glomerulonephritis and vasculitis. In the case of acute interstitial nephritis, pyuria, eosinophilia, scant casts (mainly white blood cell casts), and tubular cells are present. Myoglobinuria or hemoglobinuria should be suspected whenever there exists a urine sample that has blood on the dipstick and only 1 to 2 red blood cells in the sediment. Urine sediment with numerous coarse granular or pigmented casts and/or tubular cells are characteristic of ATN. Urinary indices will reflect tubular dysfunction and injury and will document the inability of the kidney to concentrate urine and conserve sodium (a urine osmolality <350 mOsm/kg H2O, urine Na >40 mEq/L, FE Na >2.5%) (Table 3).

Renal ultrasonography usually shows enlarged kidneys with a uniform increased cortical echogenicity; a renal scan shows poor uptake and excretion of radioisotope.
PIR QUIZ

9. The most correct statement regarding characteristics of a nutritionally adequate formula for a full-term infant is:
   A. Calcium content should be at least 1000 mg/L.
   B. Caloric content should supply 120 kcal/kg of weight.
   C. Energy content should be at least 15 kcal/oz.
   D. Fat content should provide at least 60% of the calories.
   E. Protein content should be 4 g/100 mL.

10. The principal characteristic of medium-chain triglycerides important in the feeding of preterm infants is:
    A. Content of essential fatty acids.
    B. Enhanced induction of pancreatic lipase.
    C. Greater energy value per gram than long-chain fatty acids.
    D. Increased solubility in water.
    E. Reduction in excessive absorption of calcium.

11. A major difference between human milk and cow milk formulas is:
    A. Higher fluoride content of cow milk formulas.
    B. Higher lysozyme content of human milk.
    C. Lower calcium content of cow milk formulas.
    D. Lower cholesterol content of human milk.

12. A common characteristic of these three commercial formulas—Isomil® (soy protein formula), Nursery® (soy protein formula), and Prosobee—is:
    A. Other carbohydrates are substituted for lactose.
    B. The calcium content is equal to that of human milk.
    C. The predominant fat is derived from hypoallergenic palm oil.
    D. The whey-casein ratio is greater than 60:40.

13. The mother of a first newborn does not want to breastfeed. The father allegedly had "a problem with cow milk formula." They ask about the advisability of using a soy protein formula. Among the following, the most correct statement regarding cow milk allergy and the substitution of soy protein formula is:
    A. Calcium absorption is increased in infants fed soy protein formula.
    B. Cow milk allergy occurs in 5% of the pediatric population.
    C. Cow milk protein intolerance is lifelong in the majority of affected individuals.
    D. Folic acid requirements are increased in infants fed soy protein formulas.
    E. Soy protein intolerance occurs in 25% of infants intolerant to cow milk protein.

Pediatrics in Review to Hold 1996 Cover Art Contest: Works by Children!

In 1996, we plan to display a piece of art by children on the covers of our 1996 issues. Four pictures will be chosen, and the cover artwork will be changed quarterly.

Rules of the Contest
1. The contest will run from January through July 1995. (Winners will be chosen in August 1995 for display in 1996. PRIZES will be awarded to each winner!)
2. The theme of each submission: Draw a picture of you (ie, the child/adolescent artist) doing your favorite thing.
3. Qualification: The artist must be either between the ages of a) 5 and 10 years or b) 11 and 15 years. (There will be two categories, by age, for submission and judging.)
4. Requirements: The picture must be in color and be reproducible to a size of 3 inches by 4 inches. FREE HINT TO ARTISTS: Think Big! Small details don’t show up as well.

Pediatricians: Please have your patients send art they would like considered to:
Sydney Sutherland,
Editorial Assistant
Pediatrics in Review
c/o The Department of Pediatrics, Box 777
University of Rochester Medical Center
601 Elmwood Avenue
Rochester, NY 14642
(716) 275-0170