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COVER

"Le Gourmei," painted in 1901 by Picasso (1881-1973) during his "Blue Period," demonstrates the natural appetite of the small child, who appears well nourished and even is eating standing up. Language problems in children are not inherent in their stage of development but are their response to adverse environments. The blue color, however, suggests a threat to this healthy state. Child health professionals must balance this innate healthy aspect of childhood against the environmental threats to their well-being and be advocates for the healthy development of children. (This painting is from the National Gallery of Art's Chester Dale collection and is reproduced with permission.)

ANSWER KEY

PIR QUIZ

1. Following an article about Lyme disease in your town paper, you have been invited to a local radio station to discuss the subject. A caller planning a vacation asks about the distribution of Lyme disease throughout the United States. Among the following states, the one having the highest overall incidence of Lyme disease is:
   A. Alaska.
   B. Arizona.
   C. Colorado.
   D. Georgia.
   E. Rhode Island.

2. The primary manifestation of late persistent Lyme disease, the phase of disease characteristically presenting many months after initial infection, is:
   A. Aseptic meningitis.
   B. Erythema migrans.
   C. Facial nerve palsy.
   D. Heart block.
   E. Pauciarticular arthritis.

3. A previously well 6-year-old girl was brought to your office in Phoenix, Arizona, because of persistent swelling in her right knee for 10 days. There was no history of trauma. As a life-long resident of Phoenix, she has never traveled outside Arizona. On repeated examination, abnormal findings have been confined to an effusion in the right knee joint, associated with limitation of motion, minimally increased warmth of the overlying skin, and mild tenderness. You have just been notified that her ELISA test for Lyme disease, suggested by a resident working in your office as part of the diagnostic evaluation of pauciarticular arthritis, is positive. This serologic finding most likely reflects:
   A. Antibody cross-reaction with B burgdorferi.
   B. Immunity to B burgdorferi.
   C. Previous B burgdorferi infection.
   D. Primary B burgdorferi infection.
   E. Recurrent B burgdorferi infection.

4. Nine days after removal of an embedded tick from the proximal left thigh, a 10-year-old Connecticut boy develops the characteristic rash of erythema migrans at the site, accompanied by generalized myalgia and malaise. You diagnose Lyme disease and recommend to the mother that her son be treated with doxycycline. It would be most appropriate to assure the mother that a course of doxycycline:
   A. Is free of significant side effects.
   B. May have to be repeated to assure complete recovery.
   C. Will ablate all symptoms within 48 hours.
   D. Will dramatically reduce the risk of late disease in children.
   E. Will prevent recurrent episodes of erythema migrans.

5. A cub scout leader planning to take his troop camping in Wisconsin asks your advice for preventing Lyme disease. Of the following, the most appropriate precautionary measure is:
   A. Avoidance of deer trails.
   B. Daily inspection for and removal of ticks.
   C. Frequent applications of DEET-containing insect repellents.
   D. Pretrip vaccine administration.
   E. Prophylactic use of doxycycline.
### Depression and Suicide

Several readers noted the absence of any discussion of the role that homosexual orientation might play in depression and suicide among teenagers (Brent. *Pediatrics in Review*. 1993;14:380–388).

Dr. Brent responds: "...my reason for not including homosexuality as a risk factor was not because I regard gay and lesbian youth as invisible, but because I don't think the literature firmly supports such an association between homosexuality and completed suicide. If one follows one's clinical intuition and experience, it certainly makes sense that the emergence of a gay identity would be extremely stressful in our society. However, the data are not there to support this association, in my opinion. Often cited is the 1989 report, which states that 30% of adolescent suicide victims are homosexual...the seven psychological autopsy studies of adolescents and young adults reported to date do not address the issue at all. ...While I agree with your general point that the issue of homosexuality deserves greater attention and that clinically, an association between homosexuality and suicidal risk makes intuitive sense, the data are not conclusive. I appreciate your bringing this issue to my attention because it is an important one that should be investigated more thoroughly in the future."
Ianz Seppala, Pichichero, Kim Kaplan, Association Pediatr. 1990;264:2644-2647

Ross Report 297 Resistance

Pichichero, Kaplan 1992:121:735-737


10. Doris is an 18-month-old girl who has had a runny nose, low-grade fever, and slight cough for 2 days. She has been eating poorly. She has only had one or two similar episodes previously. Physical examination reveals a moderately red throat. In planning treatment for her, you expect the most likely etiologic agent to be: A. Parainfluenza virus. B. An adenovirus. C. Chlamydia pneumoniae. D. Group A streptococci. E. Herpes simplex virus.

11. Andy is a 7-year-old boy who has complained of a sore throat, difficulty swallowing, and fever for 2 days. He does not have frequent colds or sore throats. His mother says the school nurse told her there are other children in his classroom who have similar complaints. Physical examination reveals a red throat, rhinitis, and slightly tender cervical lymph nodes. Which of the following findings would make you consider an etiologic agent other than Group A streptococci? A. Age. B. Cough. C. Headache. D. Sudden onset. E. Vomiting.

12. Ann is a 10-year-old girl who has had a fever and sore throat for 24 hours. Her illness has been characterized by sudden onset of fever, sore throat, nausea, and vomiting. Several children in her school class have had similar illnesses over the past week. Findings on physical examination include a fiery red throat and enlarged and tender cervical lymph nodes. In establishing a diagnosis, the most helpful laboratory test would be: A. ASO titer. B. C-reactive protein. C. Erythrocyte sedimentation rate. D. Throat culture. E. White blood cell count.

13. David is a 12-year-old boy who was diagnosed as having streptococcal tonsillopharyngitis 10 days ago. He had had symptoms of high fever and sore throat for 24 hours and was started on oral penicillin when a rapid strep test was found to be positive for Group A streptococci. He improved somewhat after penicillin was started, but now he again has a moderate fever, sore throat, and some difficulty swallowing. Among the possible causes for this treatment failure, the most likely is: A. Development of penicillin tolerance by streptococci. B. Early initiation of treatment. C. Effect of gastric acid on penicillin. D. Inactivation of penicillin by coexisting H influenzae. E. Noncompliance.
Much of this may be attributed to improved care. Currently, more than 50% of patients live to be 28 to 30 years or older. Although replacement of the defective gene in the respiratory tract may be some years away, the ability to clear the airway of secretions, pharmacologically alter transmembrane electrolyte and water flux, and modulate the inflammatory response in the lung, all therapeutic strategies under current investigation, promise to extend survival considerably. Thus, it will be imperative to address and improve the management of both the pulmonary and extrapulmonary manifestations of CF in the next decades and to develop adult facilities and personnel trained in and sensitive to the needs of these patients. Pediatricians and internists need to provide for the complex care, which requires expertise in pulmonary and infectious diseases, gastroenterology, nutrition, endocrinology, and surgery, as well as the vocational and psychological assistance that these patients will require during adulthood and during transition to adult facilities. Adult hospitals need to allocate resources to the care of these patients.

SUGGESTED READING

PIR QUIZ
14. Among the following, the most frequent manifestation of cystic fibrosis in the neonatal period is:
A. Hypo-electrolytemia.
B. Meconium ileus.
C. Prolonged jaundice.
D. Rectal prolapse.
E. Respiratory distress syndrome.

15. A significantly elevated sweat chloride is most likely to be found in:
A. An 8-month-old infant who has failed to thrive and has no history of diarrhea.
B. A 10-month-old infant who has vitamin D rickets and has been given only breast milk.
C. A 16-month-old infant who has had an episode of hypernatremic dehydration.
D. An 18-month-old infant who has a history of anorexia, chronic diarrhea, and malnutrition developing late in the first year.
E. A 2-year-old child who has a history of three episodes of pneumonia in the right lower lobe.

16. In performing and interpreting the sweat test to diagnose cystic fibrosis, the most correct statement among the following is:
A. Analysis of sweat sodium concentration may be substituted for measurement of chloride.
B. Hypo-proteinemic edema is associated with false high values for concentration of chloride.
C. Polycystic stimulation of sweat should not be performed in infants less than 6 months of age.
D. Preadolescent patients should be on a high salt diet for 23 days prior to testing.
E. The collection period should be for at least 120 minutes.

17. A 6-year-old girl has known cystic fibrosis. Currently, she is asymptomatic. The most important component of her daily pulmonary management program is:
A. Aerosol treatments with N-acetyl-L-cysteine.
B. Chest physical therapy with percussion.
C. Oral prophylactic antibiotics.
D. Positive pressure breathing using compressed air.

18. In the nutritional program for the child who has cystic fibrosis, the most correct statement is:
A. Calcium intake of 500 mg daily is sufficient for normal ossification.
B. Daily caloric intake should be 10% higher than usually recommended levels.
C. Fat-soluble vitamins A and D should be given in 4 to 6 times the usual dose.
D. The dose of pancreatic enzyme replacement should result in a “normal” stool pattern.
E. The problem of steatorrhea is eliminated by reducing dietary fat.

19. The diagnosis of cystic fibrosis was correctly made in a boy at 2 years of age. Treatment was begun with pancreatic enzyme replacement and vitamin supplements. He is now 12 years of age. The most likely preventable complication he may develop is:
A. Biliary cirrhosis.
B. Diabetes mellitus.
C. Meconium ileus equivalent.
D. Rectal prolapse.
E. Recurrent pancreatitis.

20. A 14-year-old girl who has cystic fibrosis has had a viral upper respiratory infection for 3 days. She develops an increased cough productive of purulent sputum over the subsequent 5 days. On auscultation, moderately fine wet rales are newly heard in the lower lung fields. Cultures are negative for Pseudomonas sp. Chest radiograph is unchanged. The most appropriate patient management is:
A. Aerosol administration of amiloride to increase water content of mucus.
B. Increase in daily courses of chest physical therapy 7 to 10 days prior to decision regarding antibiotic therapy.
C. Initiation of corticosteroid therapy to reduce inflammation associated with Aspergillus infection.
D. Oral administration of cefadroxin, a semisynthetic cephalosporin.
E. Oral administration of ciprofloxacin, a fluoroquinolone.