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Medicine[®]

1981

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Current Literature Quiz

The questions below are an informal test of your knowledge before and/or after reading the YEAR BOOK. The questions are answered by locating the appropriate article in the text by its reference number, which appears in parentheses after each question. The reference numbers indicate the chapter in which the article appears and its numerical order within the chapter.

1. *Campylobacter fetus* usually is isolated from which body site? The illness produced by this microbe can be confused with another illness, usually not thought to be infectious. What is it? (3-2 and 3-3)
2. Two environmental sources have now been documented as sources of *Legionella pneumophila* and linked to the occurrence of disease. What are they? (1-2 and 1-3)
3. Is herpes simplex encephalitis an infection which is acquired from an exogenous source? (9-4)
4. Can you describe the clinical features which characterize the "toxic shock syndrome"? (1-1)
5. Which technique would you use to diagnose giardiasis in a patient in your office? (3-5)
6. Why do group A streptococci persist in the pharynx after therapy? (10-2)
7. Why should your hospital conduct a rubella control program? (9-1)
8. When the dog heartworm, *Dirofilaria immitis*, infects human beings, how does the infection manifest itself? (1-5)
9. Which over-the-counter medication provides some prophylactic protection against travelers' diarrhea? (3-1)
10. A new focus of cholera has been described within the United States! Where? (3-4)
11. Why has controversy developed around the use of pneumococcal vaccine? (6-1)
12. How can you now foreshorten treatment for tuberculosis without compromising cure rates? (8-1)
13. How to deal with an individual bitten by a rabid animal—or one which might be, but has vanished from the scene—has worried doctors since 1885. How has this dilemma been made simpler this year? (6-3)
14. Do jejunoileal bypasses in severely obese patients pose any hazards other than metabolic? What are they? (2-2)
15. Why do homosexual males have such a high incidence of hepatitis A? (4-6)
16. What agents can you use to treat a pregnant tuberculous woman without you worrying about potential teratogenic effects on her unborn child? (8-2)
17. Changing life-styles and technology seem to have created a new kind of actinomycotic syndrome. What is the inciter and how might you manage it? (1-4)

18. There appears to have been a monumental breakthrough in the treatment of human tetanus infections. What is it? (7-1)
19. What percentage of patients known to be asthmatic are aspirin sensitive (bronchospasm induced or aggravated by aspirin)? (12-2)
20. What is the preferred regimen in the treatment of asthmatics in the emergency room and what indicators of response can be used in making a decision regarding admission? (12-5)
21. What is the effect of phlebotomy on cerebral blood flow in patients with congestive cor pulmonale with secondary polycythemia? (13-5)
22. Are large cell undifferentiated lung cancers best grouped with and treated like small cell undifferentiated (oat cell) lung cancers? (15-1)
23. What is the nature of the evidence that thrombolytic therapy should be used in all cases of pulmonary embolism and venous thrombosis? (16-2)
24. Can paraquat lung disease be caused by inhalation? (17-2)
25. What percentage of adult patients found to have generalized (miliary) tuberculosis at autopsy will have been diagnosed during life? (18-1)
26. What is the clinical usefulness of a second-strength (250 TU) tuberculin test? (18-2)
27. Do regimens containing isoniazid-rifampicin carry any risk of increased hepatotoxicity compared to regimens containing isoniazid but not rifampicin in the treatment of tuberculosis in children? (18-4)
28. Does hypercalcemia together with noncaseating granulomas present on tissue biopsy make a diagnosis of sarcoidosis? (18-5)
29. Is Legionnaires' disease an important cause of nosocomial pneumonia in the compromised host? (19-1)
30. Is treatment indicated for all cases of pulmonary blastomycosis? (19-2)
31. What is the basis for the effectiveness of the converting-enzyme inhibitor, captopril, in the treatment of congestive heart failure? Of hypertension? (29-1 and 33-6)
32. What are the effects of the calcium channel-blocking agent, nifedipine, in patients with congestive cardiomyopathy? (29-3)
33. How can one predict those patients with congestive heart failure in whom hydralazine is likely to be effective? (29-4)
34. How can one identify those patients with the Wolff-Parkinson-White syndrome at particular risk for developing ventricular fibrillation? (30-1)
35. What new surgical treatment can be used for the treatment of recurrent ventricular tachycardia? (30-3 and 30-4)
36. How is electrophysiologic testing used to predict the efficacy of drugs in patients with ventricular arrhythmias? (30-5)
37. What is the major adverse effect of the new antiarrhythmia drug disopyramide? (30-9)
38. What is an important complication of an intramural left anterior descending coronary artery? (31-2)
39. What test can be used to diagnose coronary vasospasm? What are the hazards of the test? How can they be minimized? (31-7)
40. What is the prognosis in patients in whom myocardial infarction has been ruled out after hospitalization compared to those surviving infarction? (31-9)
41. What are the most likely causes of sudden death in young athletes? (32-6)
42. In which cardiomyopathies have calcium channel-blocking drugs such as verapamil been found to be effective? (33-1 and 33-2)
43. What is the most effective way to treat patients with cardiovascular manifestations secondary to the hypereosinophilic syndrome? (33-4)

44. How can endomyocardial biopsy aid in the management of patients with myocarditis? (33-5)
45. What drugs have recently been shown to be effective in the treatment of primary pulmonary hypertension? (34-3 and 34-4)
46. What type of symptoms does coffee induce? (35-1)
47. What is the relapse rate of duodenal ulcer after cessation of cimetidine therapy? (36-1)
48. What is the difference between regular and enteric-coated aspirin with regard to effects on the gastric and duodenal mucosa and systemic blood levels? (36-7)
49. What is the role of enteral and parenteral nutrition in inflammatory bowel disease? (37-3)
50. What is an appropriate workup for a patient with chronic diarrhea of unknown origin? (37-6)
51. How often does relapse occur after vancomycin therapy for antibiotic-associated pseudomembranous colitis? What should be done in treating such patients? (38-4)
52. How useful is the newly developed hepatitis B vaccine? (39-1)
53. What is the long-term course of patients with non-A, non-B hepatitis? (39-5)
54. What is the prognosis for patients with chronic active liver disease treated with corticosteroid therapy? (39-7)
55. What special problems are encountered in patients who are chronic alcoholics who take acetaminophen? (39-11)
56. Is prednisone therapy useful in patients with alcoholic liver disease? (39-12)
57. Is the intravenous cholangiogram still considered a useful diagnostic test? (40-2)
58. List the drugs most likely to cause drug-induced pancreatitis. (41-1)
59. A 13-year old adolescent girl, 70 in. (178 cm) tall, is examined because of her stature. Computed tomography scans and polytomograms of her sella are normal. Her plasma growth hormone concentration rises from 3 to 17 ng/ml 30 minutes after she drinks 100 gm of glucose. Her serum alkaline phosphatase concentration is 180 units/L. When should her pituitary tumor be removed? As soon as possible? Within a year? Never? (42-1)
60. An 18-year-old woman with many clinical findings characteristic of acromegaly and with suggestive evidence of a microadenoma of the pituitary on polytomography has plasma growth hormone concentrations between 5 and 10 ng/ml on three separate occasions. Does this mean that she has acromegaly? What confirmatory tests could be considered? Which of the proposed tests is most likely to be reliable? (42-2)
61. A patient with an intrasellar tumor at least 15 mm in diameter has a complete workup which includes the finding of 180 μ g/24 hrs of free cortisol in the urine. Does the patient have Cushing's disease? Consider this question in two situations: one in which the patient's plasma growth hormone concentration is 3 ng/ml and the patient has amenorrhea, and the other in which it is 50 ng/ml and the patient has normal though scanty menstruation. (42-3)
62. Two years after removal of a typical growth hormone-producing pituitary tumor from a patient with clinical acromegaly and preoperative plasma growth hormone concentration consistently over 20 ng/ml, the plasma growth hormone level is repeatedly found to be depressed to 3 ng/ml or less. Because of concern that the patient may have become hypopituitary as a result of surgery, multiple growth hormone determinations are car-

- ried out during the day and a flat curve is found, without any nocturnal peak. Does the patient have hypopituitarism? Is there any treatment which might help return pituitary function to normal? (42-7)
63. A patient with clinical evidence of Cushing's syndrome has a symmetric adrenal scan which shows hyperactivity. Radiographic studies of the sella show suggestive but unconvincing evidence of a microadenoma. Adrenal activity is not suppressed by either 0.5 or 2.0 mg of dexamethasone four times daily for 2 days. The physicians are at a loss to explain the apparent contradiction and need help in making a therapeutic decision. Can you suggest an additional test or tests which might clarify matters? (43-2)
 64. Is there any way to predict when it is safe to discontinue treatment with propylthiouracil in a patient with hyperthyroidism? What proportion of patients treated in this way are likely to be cured? Is there any way to improve the probability of cure by increasing patient compliance with treatment? (44-5 and 44-7)
 65. A pregnant woman who has previously delivered a cretinous infant consults you, hoping to determine whether her fetus will be normal. How can you help her? How sure can you be about your advice to her? Are there questions you could usefully ask her about her previous diet? (44-11)
 66. What is the most effective way of evaluating solitary thyroid nodules? Name specific tests which are of value, sequence of decision making, special circumstances which would lead to early rather than late surgery, and indications for suspecting the nodule of malignancy. (44-13, 44-14, and 44-16)
 67. If you had to pick a method for detecting minimal abnormalities of glucose tolerance, what test would you use? What test is most useful in determining the overall quality of diabetic control? Discuss the limitations of the test(s) you have selected. (45-1 and 45-2)
 68. The combination of pregnancy and diabetes presents a serious challenge to the patient and physician. What therapeutic goals is it reasonable to set? Are there special problems in designing treatment if the patient develops toxemia? (45-7 and 45-8)
 69. An obese diabetic patient under treatment with chlorpropamide complains of embarrassing flushing whenever she takes a drink. This is true of hard liquor, but also occurs even after a small glass of sherry. Does this tell you anything useful about the patient? What will you tell her? Is there any way to prevent these attacks? (45-18)
 70. A woman with extensive carcinoma of the breast and a family history of multiple endocrine neoplasia is found to have a calcitonin concentration of 2.5 ng/ml (upper limit of normal = 0.8 ng/ml) which rises to 6.0 ng/ml after the intravenous injection of 0.5 µg pentagastrin per kg. Does this unfortunate woman have more than one tumor? (46-2)
 71. What is the likelihood of spontaneous recovery from rapidly progressive crescentic glomerulonephritis? (47-1)
 72. What is the most reliable indication of a benign prognosis in an adolescent who has acute, gross hematuria following a respiratory infection? (47-2)
 73. What is the most effective and inexpensive way to screen members of a family for polycystic kidney disease? (48-1) What other congenital disorder is often mistaken for polycystic disease? (48-2)
 74. A 25-year-old married woman has been treated for lupus nephritis in the past but is now asymptomatic. She wants children but is worried about

- possible deleterious effects of pregnancy on her illness, as well as the effect of her underlying lupus on fetal survival. What information do you need to advise her properly and what can you tell her about her chances for a successful outcome of pregnancy? (49-1)
75. Is there any way to preserve the benefits of steroid immunosuppression for kidney transplants while reducing or avoiding the complications of steroid treatment? (51-1)
76. Is the progress of atherosclerosis and ischemic heart disease accelerated by long-term hemodialysis? (52-6)
77. How are the usual tests of thyroid function disturbed in uremia? How would you decide if a uremic patient is hypothyroid? (53-2)
78. What features of the physical examination should spur an investigation of renovascular disease in a patient with hypertension? (54-1)
79. What is the mechanism of the hyperkalemia sometimes seen in patients on β -adrenergic blocking agents? (55-1)
80. What are some dangers of the use of intravenous phosphate salts in the treatment of diabetic acidosis? (55-6)
81. Which clinical and laboratory features distinguish primary hyperparathyroidism from humoral hypercalcemia of malignancy? (56-3)
82. What is the most useful maneuver for detecting an abnormality in calcium physiology in a patient with recurrent kidney stones? (57-1)

PART ONE
INFECTIONS

DAVID E. ROGERS, M.D.

Introduction

Some years ago, when the first antibiotics were still being touted as "miracle drugs," some medical sages were speculating that infectious diseases soon would be eliminated. A number expressed doubt about my choice of a career as an infectious disease specialist—they were worried that I might soon find myself out of a job! I persisted, despite their dire predictions, because I felt that infectious disease practice offered certain special advantages. (1) Infectious disease physicians could remain generalists because infections occurred in all age groups from neonates to the aged; they affected all organ systems; they occurred among patients on all services—orthopedics, pediatrics, medicine, surgery, etc.; and they could present both as acute emergencies and as chronic debilitating illnesses. (2) Infections offered the best opportunities for prompt and complete treatment; one could truly heal the sick. (3) The elementary tools of medical history, physical examination, and simple laboratory investigation usually provided powerful clues to diagnosis. You could be an effective bedside doctor without the interposition of elaborate technology. (4) The spectrum of molecular events, clinical disease, and community epidemiology seemed more coherent and relevant than in many other areas of medical practice. (5) With the use of vaccines and various public health measures, the ability to prevent the occurrence of disease was most attractive.

If you suspect the above is an advertisement designed to lure house staff readers into infectious disease practice, you are correct!

I obviously have never regretted my decision to stay with infectious diseases. And, as I leaf through the pages of the past few YEAR BOOKS, I realize again that yesterday's medical futurologists were using very cloudy crystal balls. Infectious disease practice has become even more challenging and fascinating than ever! The only infectious disease that has disappeared is smallpox, and many "new" ones have been recognized: Legionnaires' disease, infant botulism, pseudomembranous enterocolitis, and diarrheal disease caused by *Campylobacter* and numerous viruses, to name just a few. Indeed, each year seems to produce another novel infectious illness. This year's headliner involves the microbe with which I once was deeply involved in the laboratory, *Staphylococcus aureus*. I am, of course, referring to the "toxic shock syndrome," and it starts this section off.

As in years past, my two fine colleagues, Dr. Zell McGee and Dr. William Schaffner, made the tough decisions on what to put in this year's book. Their work, however, does not end there. They then help me and hold my hand through the whole final process of putting the comments together and prevent any of my recent ignorance from

showing. This year they taught me that rabies is not too uncommon in cows—something that I didn't know before. Further, it is termed "dumb rabies." Their assistance generally prevents yours truly from "dumb editing." Hope you enjoy the section!

DAVID E. ROGERS, M.D.