





1980  
YEAR BOOK OF  
**MEDICINE®**

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The YEAR BOOK of

# Medicine<sup>®</sup>

1980

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## Current Literature Quiz

The significant advances described in this YEAR BOOK introduce new diagnostic and therapeutic procedures useful for treating conditions seen frequently in your practice. The following questionnaire will test your familiarity with the current literature. References to the articles on which the questions are based are given in the back of the book.

1. How are gram-negative bacilli transmitted from pressure transducers to the bloodstream of patients? How can this be avoided?
2. Arterial lines can be placed in two ways: percutaneously and by surgical cutdown. Which method carries a higher risk of phlebitis and infection?
3. Splenectomy predisposes to bacteremic infection with which microorganism?
4. Surveillance cultures of what body site are useful in predicting invasive aspergillosis in patients with acute leukemia?
5. Does administration of prophylactic trimethoprim-sulfamethoxazole to granulocytopenic patients do more harm than good?
6. Your patient, woman aged 21, suffers from recurrent urinary tract infections. What behavioral changes can you suggest that might diminish her chance of reinfection?
7. A man aged 51 has a perplexing pneumonia, is disoriented, has an elevated serum glutamic oxaloacetic transaminase level and develops progressive azotemia. Which infection should be considered a serious diagnostic possibility?
8. Congenital deficiency of which complement components is associated with recurrent meningococcal and gonococcal bacteremia?
9. What are the possible explanations for failure of high-dose cephalosporin therapy in a patient with a serious staphylococcal infection?
10. What are the risks of serious *Hemophilus influenzae* infection in the household contacts of a patient who has developed *H. influenzae* meningitis? What action, if any, should be taken?
11. What new therapeutic approach promises to substantially lower the mortality of gram-negative sepsis?
12. Why should you avoid using, for renal or corneal transplantation, the tissues from a patient who died of a neurologic syndrome of unknown etiology?
13. What are the clinical predictors of corticosteroid response in chronic obstructive pulmonary disease (COPD)?
14. What are the best predictors of failure of conservative therapy in respiratory failure complicating COPD?
15. Exercise-induced asthma is more common in winter. Why?
16. Name two reasons why electronic factory workers may be asthmatic.
17. Should all patients with hemoptysis have bronchoscopy?
18. What is the most frequent treatable superinfection in patients with lymphatic neoplasms on cytotoxic therapy?
19. What is the most frequent condition leading to pulmonary scar cancer and what is the most frequent cell type?

20. What are the data concerning the advisability of monthly blood chemical monitoring of patients on isoniazid?
21. Does healed tuberculosis predispose to infection with *Mycobacterium intracellulare*?
22. What specific population groups should be suspected of having drug-resistant tuberculosis infections?
23. What diagnostic maneuvers can be used in the diagnosis of noncardiac musculoskeletal chest pain?
24. Elevated levels of terminal deoxynucleotidyl transferase are restricted to acute lymphoblastic leukemia. True or false?
25. Is it true that recent evidence suggests that ascorbic acid can prevent the common cold and cure the neutrophil defect in Chédiak-Higashi syndrome?
26. Platelet-bound immunoglobulin is increased in which of the following: immune thrombocytopenias, gram-negative sepsis or hyperglobulinemia?
27. Most cases of hairy cell leukemia are of what origin: B cell, T cell or monocyte-macrophage?
28. Does eradication of the Philadelphia chromosome from the bone marrow cells of a patient with chronic myelocytic leukemia mean probable cure of disease?
29. What are the main limitations to cure of aplastic anemia by bone marrow transplantation?
30. What is an Hpa I fragment?
31. What objective criteria are used for classifying a patient with multiple myeloma as "good risk" or "poor risk"?
32. What is the 5q-syndrome?
33. What single test would you use to detect early cardiac dysfunction in the patient with iron overload from transfusions?
34. You treat a patient, aged 45, with acute myeloid leukemia who has achieved a first remission of disease. Would you recommend chemotherapy or bone marrow transplantation from his HLA-matched sibling?
35. What is the presumed mechanism by which the plasma high-density lipoproteins (HDL) protect against the development of atherosclerosis? How does sex influence HDL cholesterol levels?
36. What is the effect of intense physical exercise on cardiovascular mortality in untrained individuals?
37. Is there any experimental evidence that aspirin can prevent the development of atherosclerosis?
38. Can Prinzmetal's variant angina be precipitated by exercise? A new series of drugs has been proposed for the treatment of Prinzmetal's variant angina; name them and indicate their mechanism of action.
39. What is the evidence that coronary spasm can induce acute myocardial infarction?
40. What is the theoretical basis for the thallium-201 exercise stress test? What is its relative sensitivity and specificity compared to the exercise electrocardiogram in the detection of coronary artery disease?
41. Describe the clinical and hemodynamic manifestations of right ventricular infarction. How can right ventricular infarction be differentiated from pericardial disease?
42. What is the meaning of a "doughnut"-shaped scintigraphic pattern of accumulation of technetium-99m pyrophosphate in patients with acute myocardial infarction? Is this pattern of any prognostic significance?
43. It has been proposed that exercise testing should be carried out at an early time after myocardial infarction, even before the patient is discharged

- from the hospital, i.e., 10–14 days following the event. What is the clinical value of such exercise testing? Is it safe?
44. It has been demonstrated that in some instances nitroglycerin produces arterial desaturation. What is the mechanism?
  45. What are the clinical indications for percutaneous transluminal coronary angioplasty? What are the hazards? What precautions are required? What role does this procedure play in the treatment of isolated obstructive lesions of the left main coronary artery?
  46. Is there sound evidence that coronary artery bypass grafting improves survival of patients with three-vessel disease compared to medical therapy?
  47. What is the effect of successful treatment of coronary artery disease on the likelihood of returning to gainful employment?
  48. What is the effect of coronary artery bypass surgery on left ventricular performance, as reflected in the ejection fraction, both at rest and during exercise?
  49. What is the most appropriate course of treatment for patients with unstable angina pectoris—intensive medical therapy? Immediate coronary arteriography followed by surgery? Either? Neither?
  50. Do depressed preoperative hemodynamics alter perioperative mortality rate in patients with aortic valve disease? Do they alter subsequent long-term survival?
  51. Name a cerebral complication of mitral valve prolapse. How should it be treated?
  52. Name two drugs recently introduced for the treatment of congestive heart failure. What is their mechanism of action? Their limitations?
  53. How do the converting enzyme inhibitors act in heart failure?
  54. What is the presumed relationship among the autonomic nervous system, prolonged Q-T intervals on the electrocardiogram and sudden death? How can this information be used in the treatment of patients at risk of sudden death?
  55. What is the effect of exercise on arterial pressure in patients who have undergone successful aortic coarctectomy in childhood? What is the mechanism for the abnormality?
  56. What is the effect of the administration of quinidine on cardiac glycoside levels?
  57. What new drug has been found to be useful in the treatment of idiopathic hypertrophic subaortic stenosis?
  58. What is the value of cimetidine in the treatment of acute upper gastrointestinal bleeding?
  59. What are the causes of delayed gastric emptying and how is this diagnosis established?
  60. What clinical features would suggest the diagnosis of *Campylobacter* enteritis? How is the diagnosis established?
  61. What is the value of sulfasalazine and prednisone in the short- and long-term treatment of regional enteritis?
  62. What are the factors that are associated with increased risk of carcinoma of the colon developing in patients with idiopathic ulcerative colitis?
  63. How should patients with severe ulcerative colitis be treated? What is the likelihood that such treatment will be successful?
  64. What is the natural history of chronic persistent hepatitis?
  65. What is the current experience with the LeVeen shunt in refractory ascites? What complications are being observed with this procedure?
  66. What are the sequelae of non-A, non-B hepatitis?

67. What nonalcoholic liver disease(s) develop in alcoholics?
68. What is the significance of the hepatitis B e antigen?
69. What eye abnormalities are found in patients with chronic pancreatitis?
70. Which of the three modalities suitable for treating acromegaly should be used under the following circumstances: pressure on the optic chiasm; early minimal disease; failure of two previously tried therapeutic agents?
71. Is there danger that a pituitary tumor will increase in size if it is treated medically rather than by local methods? What medical treatment would you consider in these circumstances?
72. How can one determine whether a child with short stature will respond to treatment with growth hormone (GH)? Do all such patients have low pituitary GH levels in the plasma?
73. How successful is induction of puberty by prolonged treatment with luteinizing hormone releasing hormone in patients with hypothalamic hypogonadism?
74. How can the differentiation of primary from secondary adrenocortical insufficiency be established most rapidly?
75. How would you decide whether to treat pituitary hyperadrenocorticism medically, by adrenal surgery or by pituitary surgery? What are the risks and advantages of each method?
76. Which of the following laboratory tests gives the most reliable estimate of the amount of thyroid hormone activity in plasma:  $T_4$ ,  $T_3$ , free  $T_4$ , reverse  $T_3$ , free  $T_4$  index;  $T_4$ /TBG (thyroxine-binding globulin)?
77. Progressive exophthalmos is a feared and disfiguring complication of Graves' disease in some patients. What is the probable cause of this complication? Name three medical methods of treatment.
78. What methods are available for following the success of treatment in patients with disseminated thyroid cancer? Are the same methods applicable to all types of cancer of this organ?
79. What is the single best way of following adequacy of control of diabetics? Can it also be used for diagnosis? Is it useful in pregnant diabetics?
80. What is the evidence that complications of diabetes are affected by the quality of diabetic control?
81. What is the best criterion now available for determining when the fetus of a diabetic mother should be delivered? Is this decision affected by maternal metabolic considerations?
82. A patient with chronic uremia complains of uncontrollable itching. What is the best current method of treatment?
83. A man aged 29 with juvenile-onset diabetes and Kimmelstiel-Wilson nephropathy had end-stage renal failure, diabetic retinopathy and combined sensorimotor neuropathy. He would like to have a cadaver transplant but no donor kidney is available. While awaiting transplantation, is center hemodialysis or home peritoneal dialysis the procedure of choice?
84. Is treatment with prednisone warranted for patients with the nephrotic syndrome due to membranous glomerulonephritis proved by renal biopsy?
85. What are the most likely renal complications of nonsteroidal anti-inflammatory drugs in patients with heart failure or underlying active renal disease? What is their pathogenesis?
86. In a patient with senile osteoporosis, is the concentration of parathyroid hormone in plasma likely to be high or low? What is the likelihood that vitamin D treatment will help?
87. Describe the treatment most likely to be successful in a patient with focal necrotizing glomerulonephritis as a result of disseminated vasculitis. How long would you continue treatment after a remission has been achieved?

88. What is the most likely cause for heavy proteinuria and hypoalbuminemia in a patient with bilateral ureteral reflux? What is its pathogenesis?
89. A boy aged 15 has had nephrotic syndrome ascribed to focal glomerulosclerosis that has progressed to renal failure. What would you advise him and his family about the possibility of long-term successful treatment with a renal transplant?
90. Should patients with hypercholesterolemia and hyperlipemia complicating the nephrotic syndrome be placed on drug therapy aimed at lowering serum lipids in order to prevent premature atherosclerosis?
91. A patient with rapidly progressive crescentic glomerulonephritis has developed oliguric renal failure despite treatment with prednisone and cyclophosphamide. Is any other treatment likely to be successful?
92. A woman, aged 39, who has been receiving chemotherapy for ovarian carcinoma develops tetany and hypokalemia. There has been no vomiting, and the blood urea is normal. What is likely to be the cause of electrolyte imbalance?
93. What is the cause of hypercalcemia in sarcoidosis?
94. A fall in blood pressure often limits the removal of excess fluid from patients on hemodialysis. What are the causes of hypotension during dialysis and how can they be circumvented?



PART ONE  
**INFECTIONS**

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DAVID E. ROGERS, M.D.

