Chapter 57. Rheumatoid Arthritis, Self-Assessment Questions

1. Which of the following treatment goals should be considered in a patient newly diagnosed with systemic JIA?
   A. Control of hypertension
   B. Maintain normal growth
   C. Evaluate for osteoporosis risk
   D. Protect joint function by limiting activity
   E. Initiate treatment for uveitis

2. A 42-year-old woman presents to your local community pharmacy with complaints of increasing joint pain. She states that her primary care physician is still trying to determine whether the diagnosis is osteoarthritis (OA) or rheumatoid arthritis (RA). While at the pharmacy to fill a new prescription for celecoxib, she asks you if she should be concerned about rheumatoid arthritis because she knows very little about it. In addition to joint pain and swelling, you describe which one of the following as being associated with rheumatoid arthritis?
   A. Asthma
   B. Colon cancer
   C. Osteodystrophy
   D. Renal insufficiency
   E. Cardiovascular disease

3. Janus kinases may influence the pathogenesis of RA by:
   A. Releasing cytokines
B. Releasing antibodies
C. Presenting antigens to B lymphocytes
D. Enhancing cell signaling
E. Binding CD28 receptors to antigen-presenting cells

4. Tocilizumab is most appropriate in which one of the following patients?
   A. A 36-year-old woman diagnosed today with mild rheumatoid factor-negative RA
   B. A 51-year-old man with a 2-year history of RF-negative RA and an inadequate response to methotrexate monotherapy and methotrexate/abatacept combination therapy
   C. A 65-year-old man with a 10-year history of RF-positive RA and a fear of needles/injections
   D. A 42-year-old woman with a 6-year history of RF-positive RA and an inadequate response to methotrexate/etanercept and methotrexate/rituximab combination therapy
   E. A 4-year-old boy with juvenile idiopathic arthritis (JIA) and an inadequate response to anakinra

5. TP is a 66-year-old woman with a history of RF-positive RA for 10 years of moderate severity with features of poor prognosis, COPD for 3 years, and heart failure for 2 years. She is a smoker and drinks two glasses of wine weekly. She does not exercise. Her current medications include methotrexate 15 mg once weekly, folic acid 1 mg daily, hydrochlorothiazide 25 mg daily, ibuprofen 800 mg three times daily as needed (used approximately once monthly), and prednisone 7.5 mg daily during acute RA flares. Her BP today is 172/88 mm Hg and CRP is 4.2 mg/L. During a recent visit with the rheumatologist, she reported a gradual increase in morning stiffness, joint pain, and swelling over the last 2 months. The rheumatologist would like to
initiate combination disease-modifying antirheumatic drug (DMARD) therapy to help control her symptoms and prevent disease progression. Which one of the following is the most appropriate agent to add to her current regimen?

A. Anakinra 100 mg SC daily
B. Rituximab 1000 mg IV at 0 and 2 weeks
C. Tocilizumab 8 mg/kg IV every 4 weeks
D. Abatacept 750 mg IV at 0, 2, and 4 weeks then every 4 weeks
E. Infliximab 3 mg/kg IV at 0, 2, and 6 weeks then every 8 weeks

6. Which one of the following drugs may worsen a patient’s lipid profile?

A. Golimumab
B. Hydroxychloroquine
C. Tofacitinib
D. Infliximab
E. Anakinra

7. A 56-year-old man recently diagnosed with RA has a medical history significant for chronic renal insufficiency, hepatitis, and diabetes. Which one of the following DMARDs should be considered at this time?

A. Leflunomide
B. Azathioprine
C. Methotrexate
D. Sulfasalazine
E. Hydroxychloroquine
8. A 32-year-old woman with a 2-year history of RA is taking methotrexate 10 mg weekly, leflunomide 20 mg once daily, montelukast 10 mg once daily, and folic acid 1 mg daily. She is interested in getting pregnant. Which of the following steps is/are necessary prior to conception?

I. Initiate cholestyramine 8 g three times daily for 11 days
II. Reduce methotrexate dose to 5 mg once weekly, increase folic acid to 2 mg daily
III. Discontinue montelukast

A. I only
B. III only
C. I and II
D. II and III
E. I, II, and III

9. Factors associated with poor outcomes of RA include which one of the following:

A. Late age of disease onset
B. Negative rheumatoid factor
C. Multiple (> 20) tender and swollen joints
D. Absence of extraarticular manifestations
E. Normal ESR levels

10. A 46-year-old woman has a longstanding history of rheumatoid factor-positive RA. She weighs 58.2 kg (128 lb) and is 165 cm (5’5”’) tall. Her most recent medication profile includes prednisone 10 mg orally once daily, etanercept 50 mg IV once weekly (replaced infliximab 2 years ago), methotrexate 7.5 mg orally once weekly, calcium 600 mg orally twice daily, vitamin D 400 units orally once daily, and nabumetone 1000 mg orally once daily as needed. She reports
increased frequency of joint pain, tenderness, and morning stiffness. The decision is made to modify her treatment regimen. Which one of the following is the most appropriate option?

A. Increase etanercept to 50 mg IV once daily
B. Discontinue etanercept; begin rituximab 1000 mg IV at 0 and 2 weeks
C. Discontinue etanercept, initiate abatacept 750 mg IV on days 1, 15, and every 28 days thereafter
D. Initiate tocilizumab 8 mg/kg IV once monthly
E. Increase methotrexate to 15 mg orally once weekly

11. Which one of the following counseling points should be discussed with a patient regarding a new prescription for methotrexate for RA?

A. New onset cough
B. An infusion reaction
C. Changes in peripheral vision
D. Yellow-orange skin discoloration
E. Increased patchy skin pigmentation

12. Which of the following signs is/are suggestive of rheumatoid arthritis?

I. Morning stiffness lasting less than 30 minutes
II. Gradual onset of symptoms over years
III. Tenderness and swelling in MCPs

A. I only
B. III only
C. I and II
D. II and III
E. I, II, and III

13. A 5-year-old boy and his mother present to the pediatrician. The child has a 2-month history of intermittent fevers, joint pain, and tenderness in seven joints and a rash that occasionally develops across his buttocks. The rash is not present when the physician examines him. The child weighs 18.2 kg (40 lb). Which one of the following disorders does the patient likely have?
A. RA
B. Systemic JIA
C. Polyarticular JIA
D. Oligoarticular JIA
E. Osteoarthritis

14. For the patient in the previous question, which one of the following regimens offers the most appropriate treatment?
A. Ibuprofen 90 mg orally every 8 hours
B. Methotrexate 5 mg orally once weekly
C. Etanercept 25 mg IV once weekly
D. Prednisone 5 mg orally once daily
E. Abatacept 500 mg IV on days 1 and 15 and then every 28 days thereafter

15. A 43-year-old cosmetologist with rheumatoid factor-positive RA was maintained on methotrexate 12.5 mg orally once weekly for approximately 7 years. Her past medical history is significant for dyslipidemia, type 1 diabetes, and anorexia. Signs and symptoms of disease are
emerging, and the addition of etanercept is under consideration. Which one of the following tests is necessary to finalize the treatment decision?

A. Oral glucose tolerance test
B. Complete blood count
C. Liver function tests
D. Tuberculin skin test
E. Lipid panel
Answers

1. B
2. E
3. D
4. D
5. B
6. C
7. E
8. A
9. C
10. B
11. A
12. B
13. B
14. A
15. D