

Osteoarthritis

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The questions below are based on the article "Osteoarthritis," which begins on page 17 of this issue. Choose the single best answer for each question.

- 1. Which of the following is seen in the earliest phases of osteoarthritis?**
 - (A) Increased water content and increased proteoglycan synthesis in cartilage
 - (B) Increased water content and decreased proteoglycan synthesis in cartilage
 - (C) Decreased water content and decreased proteoglycan synthesis in cartilage
 - (D) Decreased water content and increased proteoglycan synthesis in cartilage
 - (E) Increased water content and normal proteoglycan synthesis in cartilage
- 2. Which of the following is usually seen in noninflammatory arthritis?**
 - (A) Cloudy synovial fluid that is thin and nonviscous
 - (B) Elevated C-reactive protein level
 - (C) Erythrocyte sedimentation rate greater than 40 mm/h
 - (D) Rheumatoid factor titer greater than 1:40
 - (E) Synovial fluid leukocyte count of less than 2000/mm³
- 3. What is the mechanism of action of topical capsaicin cream?**
 - (A) Absorbed and hydrolyzed into salicylic acid and subsequently converted into salicylic acid
 - (B) Acts as an antioxidant to decrease free radical formation and inflammation
 - (C) Directly increases production of proteoglycans from chondrocytes
 - (D) Impairs production of interleukin-10 to decrease inflammation
 - (E) Impairs the function of nociceptive nerve fibers through substance P depletion
- 4. Which of the following procedures would be the best approach to treat a patient with isolated osteoarthritis of the medial compartment and no malalignment who has failed nonoperative measures?**
 - (A) Distal femoral osteotomy
 - (B) Meniscal transplantation
 - (C) Total knee replacement
 - (D) Unicompartamental knee replacement
 - (E) Upper tibial osteotomy
- 5. All of the following are elevated in the synovial fluid of patients with osteoarthritis EXCEPT**
 - (A) Collagenases
 - (B) Hyaluronic acid
 - (C) Interleukin-1
 - (D) Prostaglandins
 - (E) Tumor necrosis factor

For answers, see page 52.

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Answers to the review questions asked on page 34. The article on osteoarthritis begins on page 17.

1. (A) Increased water content and increased synthesis of proteoglycans in cartilage
2. (E) Synovial fluid leukocyte count of less than 2000/mm³
3. (E) Impairs the function of nociceptive nerve fibers through substance P depletion
4. (D) Unicompartmental knee replacement
5. (B) Hyaluronic acid

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