

Orthopedic Joint Replacement Questions

- 1 Why should we learn about new orthopedic implant technologies?
  - a) More future patients might ask us about these technologies.
  - b) These new technologies might affect your patient's rehab.
  - c) The number of patients undergoing these procedures will grow exponentially and you will be more likely to treat one of these patients.
  - d) Because of the APTA's Vision 2020
  - e) All of the above
- 2 Sir John Charnley
  - a) Was the first surgeon to replace a shoulder
  - b) Designed the first partial knee replacement
  - c) Was the first surgeon to replace a knee
  - d) Was the first surgeon to replace a hip
- 3 The difference between a Monoblock implant and a Modular implant is that a Monoblock is easier to revise.
  - a) True
  - b) False
- 4 The number of total hip replacements is expected to grow faster than the number of total knee replacements.
  - a) True
  - b) False
- 5 Which one of the following statements is true
  - 1. A joint replacement in a younger patient will last shorter than a joint replacement in an older patient
  - 2. Joint survival is inextricably linked to joint activity
  - a) Only 1 is true
  - b) Only 2 is true
  - c) Both 1 & 2 are true
  - d) Both 1&2 are incorrect
- 6 The revision rate for total hip replacements is around 8%.
  - a) True
  - b) False



- 7 In 2030, 50% of 67 million will be diagnosed with OA in the US, according to the Arthritis Foundation.
  - a) True
  - b) False

8 The APTA's Vision 2020 includes

- a) Physical therapy will be provided by physical therapists who are doctors of physical therapy
- b) Recognition by consumers and other health care professionals as the practitioners of choice for the diagnosis of, interventions for, and prevention of impairments, functional limitations, and disabilities related to movement, function, and health.
- c) Direct Access acknowledges by Centers for Medicare & Medicaid Services.
- d) All of the above
- 9 Joint Cartilage contains nerves and blood vessels
  - a) True
  - b) False
- 10 Which of the following structures provides the lubrication to the joint?
  - a) Glycosaminoglycans
  - b) Proteoglycans
- 11 The **main** objective for a patient to undergo a reversed shoulder procedure is to
  - a) Improve functional ROM
  - b) Decrease pain
  - c) Improve strength
  - d) a & b
- 12 The **main** reason for a patient to undergo a total shoulder replacement is to
  - a) Improve functional ROM
  - b) Decrease pain
  - c) Improve strength
  - d) a & b



- 13 Contra-indications for the total shoulder replacement **<u>DO NOT</u>** include:
  - a) Combined rotator cuff / deltoid paralysis
  - b) Recent joint infection
  - c) Severe osteoporosis
  - d) Previous rotator cuff repair
- 14 Total shoulder replacement patients may expect to see functional improvement up to \_\_\_\_\_ months after their surgery.
  - a) 3 months
  - b) 6 months
  - c) 12 months
  - d) 18 months
- 15 The advantage of not replacing the glenoid side of the glenohumeral joint is that the bony surface will better conform to the new humeral head implant versus a polyethylene glenoid.
  - a) True
  - b) False
- 16 The recovery of a patient who received a total elbow replacement will be **most** influenced by one of the following factors:
  - a) The length of the incision
  - b) The length of the hospital stay
  - c) The ROM allowed by the implant
  - d) Whether or not the extensor mechanism was left intact during the surgery
- 17 The longevity (length of life) of a prosthetic shoulder varies from patient to patient, but is **LEAST** dependent on:
  - a) Gender
  - b) Surgeon performing the surgery
  - c) Activity level
  - d) Smoking
  - e) Bone mass
- 18 A patient with a long standing history of arthritis, with a long standing history of rotator cuff dysfunction and a good functioning deltoid muscle, will be a good candidate for:
  - a) Hemiarthroplasty of the shoulder
  - b) Ream and run procedure of the glenu-humeral joint
  - c) Reverse shoulder replacement
  - d) Total shoulder replacement



## 19 The advantages of Zimmer's Trabecular Metal include:

- a) It closely resembles the physical and mechanical properties of bone
- b) It is 80% more porous than other implant materials used
- c) It allows for faster and better ingrowth of the surrounding bone and other tissue
- d) All of the above
- 20 Zimmer's Trabecular Metal is now used in the following implant **<u>EXCEPT</u>** for:
  - a) Shoulder replacement
  - b) Knee replacement
  - c) Hip replacement
  - d) Elbow replacement
- 21 Which of the following statements regarding synovium of a synovectomy is <u>NOT</u> true?
  - a) In RA, the synovium surrounding the shoulder joint may become inflamed causing pain and stiffness
  - b) A synovectomy removes inflamed synovium
  - c) Removed synovium will not grow back after a synovectomy
  - d) A synovectomy may be all that is needed to restore motion and reduce pain in a synovial joint.
- 22 Which one of the following is the most common joint replacement?
  - a) Total knee replacement
  - b) Partial knee replacement
  - c) Total hip replacement
  - d) Total shoulder replacement
- 23 Which one of the following is NOT an advantage of The Charnley Hip System?
  - a. Offers the advantages of a modular system
  - b. Up to 99% survivorship at 10 years 4
  - c. Low frictional torque reduces stress and wear
  - d. Smaller, polished femoral head minimizes wear debris
  - e. Secure cemented fixation strong bone to cement interlock
  - f. Refined, dependable surgical procedure
- 24 Which of the following total hip implants is specifically designed for the younger, more active patient?
  - a) Stryker: Trident® Ceramic Hip System
  - b) Biomet's M2a-Magnum<sup>TM</sup> Hip
  - c) Zimmer's CPT 12/14 Hip System
  - d) The Charnley Hip System



## 25 Which of the following systems is NOT a hip resurfacing system?

- a) Birmingham Hip
- b) Durom Hip
- c) Cormet Hip
- d) Solution Hip
- 26 The difference between a Dynamic Hip Screw (DHC) and a Dynamic Variable Hip Screw (VHS) is that the VHS® System allows for compression and valgus reduction of the fracture after fixation is achieved
  - a) True
  - b) False
- 27 Some key elements of a successful total knee replacement include:
  - a) Experienced surgeon
  - b) Effective post-op rehab program
  - c) Effective post-op pain management
  - d) Alignment of the implant
  - e) Use of the CPM
  - f) a,b,c,d
- 28 Which of the following 2 knee implants are very similar in design and functional outcomes?
  - a) The DePuy: P.F.C.® Sigma<sup>TM</sup> RP Knee System & the Zimmer Gender Knee
  - b) The Zimmer Gender Knee & the Stryker Triathlon Knee
  - c) The Stryker Triathlon Knee & The DePuy: P.F.C.® Sigma<sup>™</sup> RP Knee System
  - d) The Biomet: AGC® Total Knee System & the Stryker Triathlon Knee
- 29 Which statement about the Zimmer Genderknee is **<u>NOT</u>** true?
  - a) The Genderknee is called Genderknee because it is specifically designed for males and females
  - b) Provides a better Q angle
  - c) Allows for more and better sizing of the implant, reducing overhang
  - d) Allows for high flexion



- 30 Which statement about the partial knee replacement is **<u>NOT</u>** true?
  - a) A partial knee can be revised with a partial knee
  - b) The average lifetime of a partial knee is 7 years
  - c) Medial partial knee replacement is more common than the lateral partial knee replacement.
  - d) Only one vendor has a partial knee replacement combined with a patellofemoral joint replacement (Smith & Nephew)
- 31 Important factors that may influence the functional outcome of a total joint procedure include:
  - a) hospital setting
  - b) education
  - c) anesthesia
  - d) all of the above
- 32 Which of the following statements is (are) true?
  - a) Replacing the kneecap during a total knee replacement surgery has no affect on the functional.
  - b) Sparing the ACL/PCL during a total knee replacement has no effect on the functional outcome.
  - c) Using a CPM post-operatively has no long term effect on the functional outcome.
  - d) All of the above
- 33 For total joint replacement, the revision rate is on average 10% per every 10 years. For example after 10 years about 10% needs a revision, after 20 years, 20% etc. This statement is:
  - a) True
  - b) False
- 34 During a Reverse Shoulder Replacement procedure, the mechanics of the shoulder are reversed hence the name of this procedure. This statement is:
  - a) True
  - b) False
- 35 For a Reverse Shoulder Replacement, the precautions:
  - a) Are opposite from the conventional Total Shoulder Replacement.
  - b) Include avoiding a combination of adduction and internal rotation for 12 weeks
  - c) Avoiding extension past neutral for 12 weeks
  - d) Avoiding IR/AD in conjunction with EXT i.e. when tucking in a shirt
  - e) All of the above