Flex Therapist CEUs

Total Knee Arthroplasty - High Flexion Prosthetic & Exercise

Improved knee flexion following high-flexion total knee arthroplasty

1. All of the following are true with regard to gender differences, except for:

A. Unisex prosthetics may cause overstuffing of the knee capsule in women that may limit post-operative ROM.
B. Women have a smaller Q angle than men due to their narrower pelvic dimension.
C. Q-angle variations are linked to the etiology of patellar instability and pain post TKA.
D. All of the above are true.

---

2. All subjects with _____ implants achieved post-operative ROM at least equivalent to their pre-operative value.

A. Gender-specific high-flexion
B. Unisex implants
C. Both (A) and (B)
D. None of the above

---

3. It is approximated that for each unit of decreasing BMI, _____ of ROM improvement can be expected with the gender specific implant.

A. 1 degree
B. 2 degrees
C. 3 degrees
D. 4 degrees

---

4. The American Academy of Orthopedic Surgeons claims that the normal human knee has a passive ROM of 144 degrees and that TKA success should be characterized by post-operative ROM greater than 100 degrees.

A. True
B. False

Kneeling and standing up from a chair as performance-based tests to evaluate knee function in the high-flexion range: a randomized controlled

trial comparing a conventional and a high-flexion TKA design

5. During kneeling, thigh-calf contact has been reported to limit flexion and can therefore obscure the potential benefit reached with high-flex TKA designs.

A. True
B. False

---

6. Patients in the high-flexion TKA group had higher:

A. Asymmetry between the healthy and affected legs
B. Angular velocity
C. Maximum flexion angle and thigh-calf contact force during kneeling
D. All of the above were higher in the high-flexion TKA group

---

7. This study found a significant difference between conventional TKA and high-flex TKA when using:

A. Traditional outcome scores proposed to evaluate knee function in the normal flexion range.
B. Weight-bearing functional tests.
C. Both (A) and (B).
D. None of the above.

---

8. A higher active flexion angle was obtained in the high-flexion TKA group which led to a better performance of the extensor mechanism.

A. True
B. False

---

9. If kneeling is an important activity for a patient, a high-flex design may be recommendable.

A. True
B. False

Performing high flexion activities does not seem to be crucial in developing early femoral component loosening after high-flexion TKA

10. This study observed:

A. Better knee scores for the HF group compared to the non-HF group.
B. Increased loosening rates for the HF group compared to the non-HF group.
C. Both (A) and (B).

D. None of the above.

Design modifications of high-flexion TKA do not improve short term clinical and radiographic outcomes

11. Compared to traditional designs, how do high flexion prostheses incorporate modifications to improve kinematics at higher flexion angles?

A. They have an extended sagittal curve and a 2 - 3 mm thicker posterior femoral condyle to maintain contact area and reduce stress on the insert at higher flexion angles.
B. The tibial post is located 1 - 2 mm more posteriorly to guide femoral rollback during high flexion.
C. The cam is extended to the surface of the femoral component posteriorly to increase the articular contact area at higher flexion angles.
D. All of the above.

---

12. The femoral component of the high-flexion type implants have an elongated and widened cam design to:

A. Increase stability
B. Maintain spine strength
C. Facilitate rollback
D. All of the above

Copyright © 2025 Flex Therapist CEUs

Visit us at https://www.flextherapistceus.com