



Knee Arthroplasty Biomechanics: Understanding Joint Function and Design

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Abstract

Knee arthroplasty, a common orthopedic procedure for managing severe knee joint degeneration, relies heavily on understanding the biomechanics of the knee joint and the design principles guiding prosthetic implants. This article explores the intricate biomechanical interactions governing knee joint function, the principles of implant design, and their implications for surgical outcomes. Key considerations include material selection, implant geometry, kinematics, and alignment strategies aimed at restoring normal joint biomechanics. Advances in surgical techniques and future

Conclusion

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