Abstrak

Total hip arthroplasty, the most commonly performed orthopedic procedure, is used to replace or reconstruct the hip with an artificial joint. Perspectives in Total Hip Arthroplasty outlines developments in technologies and biomaterials used for this procedure, with a focus on the tribological interactions of the materials used. Part one outlines the history of total hip arthroplasty and goes on to explore advances in techniques and biomaterials. Part two focuses on the tribology of materials used to perform this procedure, explaining the impact of wear on the load-bearing surface, a major cause of failure in hip prostheses. Chapters review a range of materials, including modern biomaterials, hybrid materials, metal, ceramic, and polyethylene. The book also discusses the tribological interactions of these materials when used in total hip arthroplasty.