

Introduction



Total hip arthroplasty is one of the most successful operations performed on the human body. However, situations arise in which the surgeon is challenged by the diagnosis, planning, and execution of difficult hip reconstructions. The goal of this issue to provide a compendium of some of the most arduous situations hip surgeons encounter and moreover offer evidence-based solutions to help guide treatment.

The enclosed articles span the gamut from hip preservation to hip salvage with severe bone loss. Dr McClincy provides a thorough review of periacetabular osteotomy in skeletally mature patients with hip dysplasia. Drs Shaikh and O'Malley provided the diagnostic and treatment pearls for hip arthroplasty in hip dysplasia patients. Dr Myers provides an excellent review on hip arthroplasty conversion which can be extremely challenging and fraught with potential complications.

Several articles are devoted to common and frustrating complications after total hip arthroplasty such as recurrent instability, abductor dysfunction, and infection. Hip instability is very common with incidence of 2%-3% following primary hip arthroplasty in some studies. Recurrent instability is rare but very challenging to treat. Dr Diemengian provides an excellent review of causes and treatment of hip instability. Dr Dombrowski and Klatt review the treatment of abductor dysfunction.

There is much debate currently as to the best approach to treat periprosthetic joint infection (PJI). PJI affects roughly

1% of primary joint replacements. Historically in the United States, chronic prosthetic joint infections are treated with a 2-stage exchange which involves implant removal, placement of an antibiotic spacer, and eventual reimplantation 3-4 months later once the infection is cleared. Recently there are been several studies advocating for one-stage revision for PJI with excellent results. Drs Maher and Klatt discuss 2 stage exchange for PJI, and Drs Mock and Fehring provide a 1-stage treatment protocol.

First described in 1988, adverse local tissue reactions remain a challenge for hip surgeons. Drs Wawrose and Urish wrote an excellent review of the science of corrosion as well as the diagnosis and treatment of adverse local tissue reactions.

The invited authors are all experts in the field of hip surgery and have been generous with their time and effort toward completing this issue. I would like to thank all of the authors for their generosity and knowledge put forth in this issue. I hope this issue provides the reader with a greater understanding of complex hip reconstruction surgery.

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