

Wound Complications following Anterior-Approach Total Hip Arthroplasty

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INTRODUCTION: Wound complications are one of the few disadvantages of the anterior approach for total hip arthroplasty (THA). Wound breakdown is attributable to various factors including the thinner, more fragile skin of the anterior thigh coupled with the moist environment of the groin crease, particularly if there is a large pannus. The purpose of this study is to enumerate the rate and risk factors of wound complications after anterior THA as well as the clinical course for patients with this complication. Additionally, we outline our treatment protocol for these wounds.

METHODS: A retrospective review of 573 total hip arthroplasties was conducted from June 2020 to October 2024. Wound complications were recorded and compared to patient demographics and comorbidities. Wound characteristics and whether there was a prosthetic joint infection (PJI) were also recorded. Wounds were treated per surgeon's preference with a combination of antibiotics, dry dressings, negative pressure therapy, and irrigation and debridement, with primary or delayed closure. The wounds were followed every 1-2 weeks until resolution.

RESULTS: There were 33 (6.11%) wound complications in the cohort that healed in an average of 60.1 +/- 39.9 days. Wound complications increased in patients with avascular necrosis versus osteoarthritis (12.5% vs 5.2%, $p=0.02$), rheumatoid arthritis versus osteoarthritis (50% vs 5.2%, $p=0.007$), use of enoxaparin vs aspirin (42% vs 5.5%, $p<0.001$), and body mass index ≥ 35 (18.9% vs 3.6%, $p<0.001$). Having a wound complication was a risk factor for PJI (9.1% vs 0.7%, $p<0.001$). Having substantial drainage from the wound was a risk factor for PJI (75% vs 0%, $p<0.001$).

DISCUSSION AND CONCLUSION: Wound complications are a relatively common occurrence after primary anterior total hip arthroplasty. Most of these wounds heal without further complication but can take a prolonged period of time to heal. Copious drainage from the wound should raise suspicion for PJI.