The Nuisance of Hemiarthroplasty In Contralateral Diabetic Foot Ulcer

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INTRODUCTION:

Hip fracture patients often have coexisting conditions, making surgical treatment decisions challenging, especially for those with chronic foot ulcers. The dilemma lies in prioritizing hip fracture treatment for rehabilitation, given the foot ulcer's impact. NICE guidelines recommend surgery within 48 hours. This case presents an 82-year-old male with a femoral neck fracture and an active chronic foot ulcer.

REPORT:

An 82-year-old male presented with a painful right hip following a fall, unable to bear weight. Two months earlier, he developed dry gangrene on his left 4th toe, which progressed to osteomyelitis despite antibiotics, confirmed by radiography. Examination revealed right hip pain, shortened leg, and limited range of motion. His left foot showed gangrene but no pus. X-rays indicated a displaced femoral neck fracture (Garden Type III, AO 31-B2.1). Infective parameters showed no active infection.

Managing hip fractures in patients with chronic osteomyelitis is complex. While surgery remains the gold standard for hip fractures, the risk of prosthetic joint infection (PJI) and sepsis is high due to the active osteomyelitis in the contralateral foot. After explaining the risks, a multidisciplinary team decided to proceed with bipolar hemiarthroplasty to initiate rehabilitation early and prevent complications like pneumonia and venous thromboembolism. However, within two weeks, the right hip wound deteriorated, and DAIR surgery was performed. The patient received targeted IV antibiotics for six weeks, followed by oral antibiotics. Despite ongoing wound issues, X-rays showed no implant loosening. The patient chose long-term antibiotic suppression over revision surgery.

DISCUSSSION:

Hip fractures in elderly patients, especially with chronic foot osteomyelitis, present significant challenges. The dilemma is whether to treat the hip fracture within 48 hours, as recommended by NICE, or to address the potential source of infection first. Delaying fracture treatment can lead to poor outcomes and increased morbidity. NICE guidelines support arthroplasty for displaced femoral neck fractures in elderly patients, but the Girdlestone procedure is an option for medically unfit patients, though it has poor functional outcomes.

CONCLUSION:

While performing arthroplasty in patients with an active contralateral foot ulcer is not an absolute contraindication, it is best to wait until the wound heals. Discussing treatment options with the patient is crucial to avoid complications like PJI, ensuring a better long-term outcome. The final treatment decision should consider the patient's condition and the infection's severity.

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