

No Increased Risk of Infection in Total Joint Arthroplasty Patients with Hidradenitis Suppurativa

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INTRODUCTION: Periprosthetic joint infection (PJI) after total joint arthroplasty (TJA) requires reoperation and is associated with increased risk of morbidity, amputation, and mortality. Hidradenitis suppurativa (HS) is a chronic, inflammatory disorder involving skin of the groin, axillae, and gluteal cleft. It is characterized by recurrent abscesses, purulent drainage, and sinus tract formation concerning for primary infection but are instead manifestations of local skin inflammation. Though unknown, the risk of PJI in HS patients is presumed to be high, which may limit access to TJA. We sought to determine if, within 90 days of TJA, patients with HS have increased risk of: 1) PJI; 2) delayed wound healing; 3) reoperation for any reason; and/or 4) emergency room (ER) visits or readmission.

METHODS: Our source population was from the TriNetX database, containing over 87 million patients from 1995 to 2020 at 59 academic medical centers and healthcare organizations worldwide. CPT and ICD codes were used to identify all TJA patients and match those with HS (n = 719) to those without HS (n = 719) across demographics and comorbidities associated with increased PJI risk: age, gender, race, obesity, diabetes, renal disease, gastric bypass, rheumatologic disease, preoperative anemia, coagulopathy, congestive heart failure, chronic pulmonary disease, depression, psychoses, metastatic tumor, and peripheral vascular disease. Multivariate logistic regression was used to identify covariates associated with 90-day outcomes of interest.

RESULTS: TJA patients with HS did not have increased risk of 90-day PJI ($p = 0.8388$), delayed wound healing ($p = 0.5283$), reoperation for any reason ($p = 0.8361$), ER visits ($p = 0.4722$), or readmission ($p = 0.8493$) compared to TJA patients without HS.

DISCUSSION AND CONCLUSION:

Patients with HS undergoing TJA do not have increased risk of 90-day PJI or other adverse events. The significant skin manifestations of HS should not deter surgeons from performing TJA.