## Primary Closure of Soft Tissue Abscesses: Challenging Surgical Dogma

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## Introduction –

• Soft tissue abscesses are a common pathology cared for by general surgeons in many practice settings. The management of which has changed little over time. Incision and drainage of the collection followed by packing of the wound until healing by secondary intention is almost universally accepted at the mainstay of treatment. However, many deeper tissue infections are managed with percutaneous drains and infection is cleared adequately. We hypothesized that abscesses could be aggressively debrided and closed primarily with a small caliber drain in place and have acceptable recurrent infection rates and improved patient satisfaction compared to leaving wounds open and packed.

## Case description –

This is a prospective study consisting of inpatient general surgery consults at a 980 bed facility in 2021. Enrollment criteria was any adult patient with a subcutaneous abscess of varying anatomic locations. Patients with comorbidities such as diabetes, immunosuppression, obesity were included. All of these abscesses were managed with operative debridement, pulse lavage irrigation with plain saline, and primary closure with drain placement. These patients were seen in follow up and post operative metrics for success were followed.



- **Discussion/Results** 30 patients were enrolled in this study. Abscess locations varied from peri-rectal abscesses to axillary abscesses. The majority of these abscesses were spontaneous in nature, but some were surgical site infections. 0% of patients required re-operation or purposeful opening of the wound closure. Average time to removal of surgically placed drain was 7 days. Dehiscence of wound closure was rare, with 7% incidence.
- Aggressive debridement and primary closure of abscess-related wounds is a superior way to manage this infectious pathology compared to wound packing. Recurrent infection requiring intervention is very rare, and there is no wound care to be performed aside from drain management. This resulted in very little need for home health and expedited discharge.

