

Use of Silver Nitrate Application as Mini-Invasive Treatment of Pilonidal Sinus Disease

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Abstract

Objective: To investigate the cure rate and adverse effects of silver nitrate application for treatment of pilonidal sinus disease (PSD).

Methods: Number of sinus pit orifices, and complications with silver nitrate application and debridement for sacrococcygeal PSD between January 2015 and July 2018 were analyzed in this retrospective study. Data were obtained from surgical, discharge, and outpatient follow-up records. Among 56 patients who were treated with silver nitrate stick, 11 patients with incomplete hospital records were excluded from the study. Demographic data including age, gender, length of follow-up, number of silver nitrate applications, number of involved sinuses and recurrence and complication rates were recorded. Results were expressed as frequencies, means, and range of values. The Mann Whitney U and chi square tests were used to evaluate significance.

Results: Mean age was 24.3 ± 5.18 (range, 14–36) years, and recurrence occurred in 4 (8.9%) patients. Complications developed in 10 (22.2%) patients and included abscess, erythema, and necrosis in 5 (11.1%), 2 (4.4%), and 3 (6.6%) patients, respectively. The recurrence rate was significantly higher in patients who developed abscesses during the follow-up period ($p = 0.001$) than those who did not. There was no statistically significant correlation between the recurrence rate and number of sinuses or the number of silver nitrate applications.

Conclusion: Low morbidity and high healing rates achieved with silver nitrate provide support for this application as a feasible and effective conservative outpatient treatment for PSD in certain patients.

Key words: minimally invasive therapy, pilonidal sinus, silver nitrate