

Abstract

Introduction: Pressure ulcers are a common problem in patients with neurological disorders and prolonged immobilization, which leads to significant morbidity, occasional mortality with long hospital stay and expenses.

Present Scenario: Currently, the standard treatment provided is normal saline dressing for clean non-infected pressure ulcers. Topical Sucralfate has been used to heal burn wounds and various dermatological conditions like erosive dermatitis, aphthous stomatitis, intertrigo and acute radiation esophagitis. The results of these clinical trials have been positive in favour of Sucralfate.

Objectives: In this study, we determined if Sucralfate increases the rate of healing of pressure ulcers (grade 3) in comparison to normal saline.

Patients and methods: Patients matching inclusion criteria were divided into two groups. The control group received conventional normal saline dressings (present standard of care) and the intervention group received 7% Sucralfate ointment. The Sucralfate ointment was prepared by the institutional pharmacy. An assessor scored the wound (PUSH Tool 3.0), take tracings of ulcer perimeter on a transparent sheet for area calculation and volume of ulcers on day 1, day 7 and after the completion of the study (Day 14). The volume on analysis days was assessed using a custom program developed by the Department of Bioengineering, CMC, Vellore using Microsoft Kinect.

Results and conclusion: Both descriptive and analytical statistics were carried out. The percentage change in area and PUSH 3.0 score were found to be significant in the Sucralfate group. However, due to a lesser sample size, the baseline area and volume had variation. As a result, the percentage decrease in volume in the Sucralfate group was not significant; although the median of percentage decrease in Sucralfate group was much more when compared with the percentage decrease in the normal saline group.

Keywords

Sucralfate, Pressure Ulcer, PUSH 3.0 score, Microsoft Kinect, Normal Saline,
Pressure Sore, Dressing