

Complications of Silicone Sheet Application in Scar Management

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Abstract

Plastic surgeons play a major role in prevention of occurrence of unsightly scars, as well as management of the scars that have already occurred. Recent guidelines suggest the use of silicone therapy as a non invasive first line prophylactic for the prevention and management of both keloid and hypertrophic scars. In this article we would like to describe our experience with the use of silicone sheet for scar management.

Keyword: Silicone Sheet, Scar

INTRODUCTION

Scarring can have many consequences like, Unpleasant physical impairments, aesthetic issues, and psychological and social troubles. There is a wide range of scarring which can be either a simple mature linear scar or can be a abnormal raised and hypertrophic scar or a troublesome keloid.¹ Plastic surgeons play a major role in prevention of occurrence of unsightly scars, as

well as management of the scars that have already occurred. Many option invasive and non invasive are available for the management of scars, the choice of which is based on the surgeon preference and suitability of the technique for a particular scar. Recent guidelines suggest the use of silicone therapy as a non invasive first line prophylactic for the prevention and management of both keloid and hypertrophic scars.² In this article we would like to describe our experience with the use of silicone sheet for scar management.

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MATERIALS AND METHODS

This was done in a tertiary care hospital in south part of India after receiving approval from departmental ethics committee. The subject is a 40 yrs old male with post necrotising soft tissue infection of right leg and foot. Initially he was managed for necrotizing fasciitis (Figure 1) and after that scar management was started. Silicon sheet was applied for scar management. Observing

day by day will help us to know any complications with silicon sheet (Figure 2). On third day of



Fig. 1: Healed wound with scarring

application of silicon sheet, we have observed maceration (Figure 3) of skin at wound area.



Fig. 2: Application of Silicone Gel Sheet dressing for Scar



Fig. 3: Maceration seen after silicon sheet application

- Step 1 : Make wound free of infection.
- Step 2 : Wound management up to granulation tissue cover completely.
- Step 3 : Apply silicone sheet
- Step 4 : Look for complications.

RESULTS

After that we have removed the dressing and treated with antibiotics and regular dressing (figure 4). Therefore maceration of skin can be considered as a side effect of silicon sheet dressing.



Fig. 4: Complete Healing of Maceration after removal of silicone sheet.

DISCUSSION

Scar management is an important step in management of wound. Topical silicone therapy is commonly used to treat hypertrophic scars and keloids, as well as to prevent the formation of aberrant scarring. Silicone gel sheeting (SGS) has been shown to be useful in scar control, however it does have certain drawbacks. SGS cannot be used on some regions of the body.⁴ Sheeting is impracticable for large regions or near joints, and it is difficult to use on the face or other areas where the curves or motility of the skin make adequate contact and coverage problematic. Scars are to be repaired as they can give ugly appearance and sometimes restriction of daily activities. So it is better to know about new techniques and complications associated with them. Silicone gel sheets (SGS) transmit half as much moisture vapour as bare skin. Moisture accumulated in the stratum corneum of the skin as a result of this impact, leading to the conclusion that the stratum corneum can behave as a water reservoir in their study.⁵

Silicone sheet application has been seen as an upcoming technique in treating scars. So we should study about the complications associated with it. After the application of silicon sheet dressing we have observed the skin maceration after 2 days. Then it was resolved with antibiotic dose and regular dressings.

CONCLUSION

Skin maceration has observed with application of silicone dressing. It was resolved with antibiotics and regular dressings. Skin maceration can be considered as a complication of silicone sheet dressing.

Conflicts of interest: None

Declarations: None

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