## A clinical study of collagen dressing in partial thickness burns

## **ABSTRACT**

## INTRODUCTION

Burn injuries are very painful conditions which usually heal slowly and that too with scarring. They are common entities encountered in our daily clinical practice. Dressings play a vital role in the management of burn wounds. As burn injuries are common in developing countries, there is an urgent need for a method by which these injuries heal early with less pain, discomfort and scarring. Hence a need is felt to study the effectiveness of wound healing process in collagen dressing.

**Aims & Objectives:** This prospective clinical study was designed to study the effectiveness of collagen dressing in partial thickness burns by means of pain score, infection rate, rate of healing, resultant scar and patient compliance..

*Materials & Methods:* This study was conducted at Government tirunelveli medical college hospital, Tirunelveli. A total of 60 patients with partial thickness burn wounds were included in this study and were applied collagen dressing. The variables analyzed were pain score, infection rate, rate of healing of the wound, resultant scar and patient compliance. **Inclusion criteria:** Patients with partial thickness burns involving <40% of the total body surface area and wounds not older than 24 hours are included in the study. **Exclusion criteria:** patients with full thickness burns, burns involving >40% of the total body surface area, wounds older than 24 hours and facial burns are exclusion criteria for this study.

**Results:**  $\Box$  In my study, 34 males and 26 females, infection was present in 8.3% of the patients (5/60), the average pain score in the range of 0 to 10 was 2.85, healing was achieved on an average of 11.57days, 100% of patients in collagen dressing had good scars, patient compliance in the collagen dressing was good about 96.7%, none of the cases showed any adverse reaction to the collagen.

**Conclusion:** Collagen sheet promotes early healing, decreases the need of analgesics, reduces the incidence of associated complications like infection. The morbidity of the patients is reduced as the resultant scar is better in majority of the patients using collagen. Because of the simple application and good tolerance of the membrane, collagen can be advocated as a temporary biological dressing material in partial thickness burns.

Key words: partial thickness burns, dressing, collagen,