INTRODUCTION
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Thermal injury, a serious medical, social and economic problem is known to claim approximately one lac, ten thousand lives every year in our nation (Sinha et al, 1968). Man has been plagued by thermal injuries ever since he learnt to, and began, using fire. In our own hospital, as the records suggest, admissions on account of thermal injuries have continued to be on the rise with a mortality rate of about 37% in one single year, a fact resulting from the consequences of these burns - medical, social and economic. Progressive industrialisation has led to increased frequency of burns from chemicals, electricity and radiation etc. Roughly speaking, a single human is afflicted with burns each minute with its antecedent complications to follow.

The consequences of burns are complex, the treatment is costly and requiring great skill, patience as well as team effort. Prolonged hospitalisation is often necessary to even prevent the threat that these kinds of injuries pose to life the affected individual owing to the immediate and delayed complications. Reconstructive procedures and therapeutic, vocational and social rehabilitation may last for many months before
the patient is able to return to an active normal life. The well known therapeutic problems posed by burns include shock, pain, infection - local and systemic, denuded burn areas and deformities. Burns tend to result in wide raw areas and coverage of these areas remains an inseparable part of the management till date. In the early 19th century, the thought of autogenous skin grafting to cover the raw skin areas came into use. This was established to be the ideal treatment modality that could be used, however, it was associated with the following complications: i) large burns required autogenous donor area of a large size which was often not feasible, ii) patients in shock due to burns could not be subjected to surgery, and iii) the procedure itself would leave a raw area at the donor site. In view of these problems, various workers to cover the burn areas in an attempt to produce and hasten their healing.

Regarding wounds, the qualities required for a safe dressing material to be used in burns can be taken as follows:

i) it must be non-toxic in case it is absorbable,

ii) it must be water soluble so that heat loss due to vaporisation is minimal,

iii) it must possess antiseptic property,
iv) it must not be injurious to viable tissue cells over wounds nor should it interfere with proliferation of epidermis or taking up of skin grafts,

v) resistant pathogens should not develop during its use,

vi) it should be easily and readily procurable and durable,

vii) it must be inexpensive,

viii) its application and removal should be easy.

To fulfill the above criteria, various materials were suggested by different workers. Biological coverings as heterogenous skin grafts, collagen sheets, fetal membranes and synthetic substances as various films, fabrics, foams and laminates have been used. Studies on the use of resin oil emulsion, amniotic membrane and Povidone-iodine plus Neosporin powder as coverage materials have been carried out at our institution with beneficial results. Povidone-iodine plus neosporin powder have been found to show better results in terms of average healing time, but were found to be associated with pain and sometimes hypergranulation and local allergic reactions. Simultaneously, many cases showed tendency to improve and heal well after simple cleaning with sterile solutions without using any covering,
if the direct contamination of the wound was kept away
with adequate care.

This prompted us to undertake this study to see
and compare the effects of simple cleaning of burn wounds
with sterile saline solution and Betadine-Neosporin
dressings in similar cases, re-evaluating the latter and
chalking out a profile of comparison between the two.

AIMS OF STUDY

1. To study the effects of isolated simple cleaning,
done daily, of burn wounds on their healing.

2. To study and to re-evaluate the effect of covering the
burn wounds with Povidone-iodine plus Neosporin powder.

3. To compare the results of simple daily cleaning of burn
wounds with those treated by Betadine-Neosporin
dressings in terms of effects on healing.