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Burn remains the major health problem throughout the world. It has caused major suffering to mankind physically, socially as well as economically.

According to "Central Bureau of Health Intelligence" number of deaths by fire in 1984 were 15,741 which had increased up to 18,943 in 1988.

The vast advancements in medical science and availability of various broad spectrum antibiotics has lengthened survival time but still late deaths due to burn burns are invariably associated with infection. As burn injury creates large raw area with serum exudate provide a huge culture plate for micro-organisms and leads to wound sepsis.

In addition to infection, wound maceration and pressure necrosis also favours microbial proliferation and impair circulation. The vascular nature of burn tissue as a result of thrombosis of vessel limits the delivery of systemically administered antibiotics leading to propagation of bacteria.

To minimise the effect of raw surface produced by burn injury various biological and synthetic covering material have been used by various workers at different times. But a perfect wound dressing is still a dream because covering materials although being good dressing materials have their limitations and disadvantages like
subgraft suppuration and limited availability.

In case of deep burn because of prolonged ischaemia even adequately administered local antimicrobial agent do no reach the subescharal plane. The systemically antibiotic can only reach the subescharal plane by gradient diffusion. Because of thrombosis of burn wound vessels it is not possible to prevent the colonization of bacteria.

Yet the search for ideal topical therapy has proved elusive. Hence the problem ought to be confronted on a war footing.

The recent years witnessed a spurt in the development of topical microbial agent. To name a few of the important agents, some of which are still in vogue like Sulfamylon or Mafenida (Moncrief, 1974), Cerium nitrate (William W Monofo et al, 1975), 0.5% Silver nitrate (Mayer et al, 1960), SSD (Fox Jr, 1975) and mercurochrome.

To add insult to injury each of these agents possesses a number of deleterious side effects which in the ultimate analysis could prove lethal if proper safeguards are not observed.

Out of all these Povidone-Iodine is particularly in use over a period of almost four decades. Garner et al (1959), Georgide (1962), Connell (1964), Copeland (1972) Georgide (1972) reported their experience with Povidone-Iodine. They have found it to be one of the best and most
preferred antiseptic agents because of its broad spectrum, good penetrability through eschar while exerting its microbicidal effect. Iodine released from Iodophor (Polyvinyl Pyrrolidone) after application of PVP-Iodine, precipitates the protein of bacteria and react with the exudate protein on the wound surface forming a firm crust under which no micro-organism can survive.

**Neosporin powder (Welcome and Burroughs)**

consists of 3 ingredients - Neomycin sulphate, zinc bacitracin and polymyxin B. All are prominently a locally acting bactericidal.

On history of burn wound after Gram's staining helps in identification of bacteria. The commonly recovered microbes are:

**Gram Negative:** Klebsiella, E. Coli, Pseudomonas etc.

**Gram Positive:** Enterococci, Staphylococcus epidermidis, Staphylococcus aureus, Streptococci.

**Other opportunies:** Fungal e.g. candida, yeast and viral.

Keeping whole of this idea in mind a detailed study using PVP-Neosporin powder locally by Sinha et al (1988) showed extremely encouraging results in terms of control of infection and markedly reduced healing time of burn wound. To enhance the effectiveness of the above results using PVP4Neosporin , following study using
multiple subescharal injections of PVP was done.

In present study in addition to the above multiple subescharal injections of povidone-Iodine in subescharal plane were added to counter the infection in subescharal plane. By this directly increasing the level of subescharal antimicrobials and helps in early escharoclysis by opening up subescharal plane and thereby decreasing bleeding on separation of eschar.