

THEMISEAL IN TREATMENT OF DIABETIC FOOT ULCER

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Modern wound management principles include the concept of maintaining moist wound environment for the rapid healing. The moist environment promotes autolytic debridement, angiogenesis and adequate fibroblast migration which are vital for rapid wound healing. Various dressing materials from antibiotic ointment to sophisticated occlusive dressing have been used. Hemolok solution has been in use for last 4 to 5 years. However the solution has limitation as it does not maintain optimal moist environment. It is also cumbersome to use. Therefore water based gel was found to be useful. The gel was used in 25 patients of grade 2 to 3 Wagners Classification diabetic foot wounds from Jan 2001 to May 2001. The gel was used immediately post operatively as a hemostatic along with paraffin gauze. The gel was subsequently used for routine dressings. The wound was irrigated with saline and the gel was spread over the wound with sterile gauze and the wounds were covered with sterile paraffin gauze. Out of 25 patients 15 were grade 2 wagners classification and 7 were grade 3 and 3 were grade 4. Out of 15 patient of grade 2, 11 wounds healed in 8 to 11 weeks while 2 wounds require 12 weeks. One patient died due to medical complication and one patient was lost to follow up of grade 3 wounds one patient had extension of the infection and required higher level amputation. Out of remaining 6, 4 wounds healed in 12 to 14 weeks. Two patient required revascularisation by venous by pass graft. These patients wound 16 weeks to heal. out of 3 patients with grade 4 wounds one patient required higher level amputation while remaining two patients wound healed after 18 weeks . The gel was found to be easy to use. Separate tube was used for every patients. Patients when they were discharged from the hospital domiciliary dressings were arranged. Patients were supplied with the gel. The culture sensitivity of the wounds was done pre operatively and majority of the wounds have polybacterial infection with predominant. *S. aureus*, *S. Pyogenes*, *P. Areugenosa*, *E. Coli* being predominant organisms. All supportive measures like glycemic control, antibiotics, off loading of the affected foot, were similar for all 25 patients.