Experience with MEBO in Treating Surface Ulcers with Bone Exposed

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[Abstract] Objective: To observe the efficacy of MEBO (Moist Exposed Burn Ointment) in treating surface ulcers with bone exposed. Method: Fifty-eight cases of this disease were treated with MEBO. Result: Small surface ulcers were healed after MEBO treatment. Large surface ulcers were healed with skin autografting. All the patients were healed in 2 months. Among them 2 cases were healed without skin grafting and 16 cases received skin grafting after granulation. The total effective rate was 100%. The curative rate was 72%. Conclusion: MEBO is effective in treating surface ulcers with bone exposed.

[Key words] MEBO; Bone exposed; Surface ulcer; Efficacy;

The curative effect of chronic surface ulcer especially surface ulcer with bone exposure is usually bad. It will cost time and money and will cause a lot of pain to the sick. Fifty-eight cases (bedsores patients were not included) of surface ulcer with bone exposure were treated using MEBO from 1995 to 2001. In the subsequent two years' follow-up, the efficacy was satisfactory. The details are as follows:

First: Material and Method

1. Clinical Data

Fifty-eight cases were included and the course of disease of all the patients was over one year. The longest time was 14 years. The age of the patients was from 7 to 52 years old involving 43 males and 15 females. Causes of burn: 28 cases of burn wounds, 15 cases of traumatic wound, 8 cases of skin infection and osteomyelitis, 7 cases caused by others reasons. The ulcer area was: 5 cm × 6 cm ~ 10 cm × 26 cm. There were more than two kinds of germs growing when germiculture was performed on the wounds.

2. Treatment Method

The wound was simply debrided. The purulent exudation and the overgrown granulation tissues and the necrotic bone matters were removed. The wound was rinsed with saline thoroughly and it was covered with MEBO. Wound dressing was changed once every 2~6 hours. The residual MEBO and the exudation were wiped off before change of wound dressing. If the wound was small and clean, MEBO was spread onto the burn wound directly. Wound dressing was changed 1~2 times a day. The burn wound was debrided as early as possible to make MEBO take action as
soon as possible and to shorten the liquefaction and the removal time of necrotic tissues and in the end shorten the course of disease. The patients were examined to confirm whether they had diabetes and low proteinemia in order to modify the treatment according to these as soon as possible.

Second: Result and Typical Cases

1. Result

All the fifty-eight cases recovered within two months. Among them, 42 cases were healed with the application of MEBO throughout the treatment and 16 cases received skin grafting or musculocutaneous flap transposition after granulation formed. There were 7 cases with skin ulcer broken within 3 to 6 months after healing in the follow-up. The patients recovered after the second skin transplantation. The total curative efficacy was 100% and the healing rate was 72%.

2. Typical cases

Case one: Patient Ma, male, 58 years old. The both lower extremities, the left upper extremity and the chest of the patient were hurt because of the burning of clothes after drunk. The scars on the both lower extremities and the left upper extremity were cut and autografting was performed. Both the tibias were exposed after operation and the wound couldn’t be healed for a long time. The burn wound was debrided and the necrotic tibia was removed. MEBO was spread onto the wounds and granulation tissues grew on the wounds. The wounds were healed with autografting on the granulation tissues.

Case two: Patient Li, female, 37 years old. The medullary sinus in the left femur formed and the ulcer broke repeatedly. The course of disease was as long as 13 years. The wound was debrided and the sinuses were removed, so were the necrotic bone matter and the overgrown tissues. The burn wound was filled with MEBO oil gauze and the wound dressing was changed 1~2 times a day. Granulation tissues appeared on the wound. The patient was healed after 40 days and there was no recurrence in the 3 years’ follow-up.

Third: Experience

The traditional treatment method for patients with surface ulcer in combination with bone exposure is as followed: 1) debride the wound thoroughly; 2) remove the necrotic bone matter and scars that interfere with the healing of wounds; 3) create granulation area; 4) treat the patients with anti-infection method systematically or locally and 5) autografting or flap transposition is adopted to close up the wound when it becomes fresh and sterile. The course of disease is long and the expense is
high. However, the treatment is relatively easy and the cost is low when using MEBO method. According to our clinical experience, MEBO is a kind of good external used medicine for burn wound and surface ulcer. The efficacy of it for surface ulcer with bone exposure is better than other methods. The main experiences are as follows:

1. MEBO can promote the growth of the skin around the wound and the growth of granulation tissues. According to the reports, MEBO can irritate the potential regenerative cells in skin around the ulcer so as to accelerate the growth of skin \[1\]. The extended skin will cover the wound continuously when the granulation tissue grows. MEBO can restrain the formation of scars effectively. The patients in this research were healed without scar formation or only with slight scar formation. The compositions with the function of promoting blood circulation to remove blood stasis in MEBO have the ability of promoting the growth of new tissues and retrieving vitality with slough tissues discharged, improving the blood circulation at the wound and also promoting the supply of nutrient matter. So MEBO can accelerate the healing of the wound.

2. There are several kinds of germs infection at the wound according to the germiculture and they have resistance to many kinds of antibiotics. And this is one of the reasons why ulcers are refractory. MEBO has strong anti-infection effects on the infected germs at the wound \[2\]. The β-Sitosterol and scutellarcin included in MEBO are traditional Chinese herbs with anti-infection function and the germs that have resistance to common antibiotics are sensitive to these compositions.

3. It’s easy to use and the operation is simple. Strict asepsis technique is not required when using MEBO. The patients can be treated at home without efficacy difference.

References
