The Application of MEBO in Treating Burns Complicated by Infectious Eczematoid Dermatitis – A Report of 13 Cases

Zhou Yongfang

Department of burn, Affiliated Subei Hospital of YangZhou Medical College

[Abstract] Infectious eczematoid dermatitis is an allergic reaction caused by metabolic products of bacterial endotoxin. Usually there are chronic infections reactions nearby. Clinically, there are local tissue congestion, swelling, small papule, pruritus, small blister, even pus-pocket, scab and squame. Last year, we cured 13 cases of infections of burn at the early stage and infection of ulcerated scar at the late stage, complicated by infectious eczematoid dermatitis, using moist exposure therapy and MEBO. The average time for the eczema and inflammatory reaction to disappear was 4 days. The burn wounds and ulcers cured in 12 days.

[Key words] Eczema; Burn MEBO

The burns complicated with infectious eczma-toiddermatits is not a scarce disease in the burns surgery. Thirteen cases have been treated in our hospital for nearly one year. MEBO can develop local microcirculations, improve local immunity, adjust the sensitivity of the nerve ending, as well as possess perfect analgestic, antipruritic and anti-infectious effects. Moreover, MEBO also has no toxic or side action. Consequently, the author treated the cases of burns complicated with infectious eczma-toiddermatits by using MEBO. It effectively restrained the spread of eczema and inflammation. Besides, the burns and scar ulcers healed in advance. It gained confirmative dual curative effects. Hereinafter, report it in detail.

Clinical Data:

I General Information: This group included 13 cases. Among them, 7 cases were male while 6 cases were female; 10 cases were adults while 3 cases were children. They were 4-58 year-old and their average age was 27 year-old.

II Injurious Cause: Eight cases were scalded by hot water. The other 5 cases were individually scalded by molten iron, hot asphalt, boiled oil, flame and hot-water bag. The wound area maximally was 25x8cm² while minimally was 8x6cm². The complicated infectious eczma-toiddermatits occurred at the 8th ~58th day post injured and averagely at the 23th day.

III The Therapeutic Method: Application of MEBO. After examination, the burns
complicated with infectious eczma-toiddermatits firstly received simple debriedement, and was irrigated with 0.9% saline. Pressed MEBO onto the sterilized tongue depressors or cotton sticks and then applied 1 mm thick drug onto the burns or the eczema according to the routine medication. After that, applied drug every 3~4 hours. Cleaned and applied drug again according to the foregoing method every 4 days until the eczema and inflammatory reaction completely disappeared and the burns and scar ulcers healed.

VI The Curative Effects: Among the 13 cases, it averagely took 4 days to make the eczema and inflammatory reaction completely disappear, and 12 days to make the burns and scar ulcers cure. See the following table.

<table>
<thead>
<tr>
<th>The disappearing Time of Eczema (day)</th>
<th>The number of Case</th>
<th>The Healing Time of Wound (day)</th>
<th>The number of Case</th>
</tr>
</thead>
<tbody>
<tr>
<td>3~4</td>
<td>9</td>
<td>7~10</td>
<td>5</td>
</tr>
<tr>
<td>5~7</td>
<td>4</td>
<td>10~18</td>
<td>8</td>
</tr>
</tbody>
</table>

Typical Cases:

Case I: Huang X X; Female; 20 year-old. The right dorsum pedis was scalded by hot water. The burns ulcerated and the skin around burns margin was swelling and closely set small papules after 15 days post injured. She was treated in our hospital after it itched for 5 days. Examination: Normal general condition. There was 15x10cm ulcer wound of deep two degree on the right dorsum pedis, which was attached by a layer of yellow coat with light yellow liquid exuding. The surrounding skin was swelling. The skin on the lower 1/3 part of the right lower leg, right dorsum pedis and planta pedis were full of close-set pinhead-sized papules. Diagnose: Burns complicated with infectious eczma-toiddermatits. According to the above method of debriedement and drug application, the symptoms of itch and pain were eliminated in a short time. On the 3rd day, the eczema and inflammatory reaction completely disappeared and the area of wound reduced to 2 x 3cm². On the 7th day, the wound flatly cured. After 6 months, the follow-up visit showed that it did not recur.

Case II: Gao X; Female; 34 year-old. On the 35th day after the left lower leg scalded by hot water cured, the 25X8cm² proliferative scar of the original wound swelled, ulcerated, exuded out yellow liquid and was set by pinhead-shaped papules. The patient suffered from unbearable itch, so came to receive treatment in our hospital after 3 days. Examination: The secondary infection caused by scar ulceration complicated with infectious eczma-toiddermatits. After hospitalized, the patient was immediately treated with this therapy. On the 4th day, the eczema and inflammatory reaction completely disappeared and the itching symptom was restrained. On the 8th day, the ulcerated scar healed. After 3 months, the follow-up visit showed that it did not recur.
Discussion

1. Infectious eczema-toiddermatitis is a kind of dermatosis caused by bacteria. The main cause is the allergic reaction caused by the metabolite of the toxin in bacteria. Before invasion, near the wounds, there was often chronic bacterial infectious focus, which causes the release of histamine locally, capillarectasia and the increasing of capillary permeability. Besides, the focus constantly excretes secretion that stimulates near tissues and cause pathological change. The clinical symptom always includes: congestion, swelling, small miliary papules, small blisters, running sores, scabs, membranous desquamations and etc. around the focus. Along the scratching direction, the above symptoms linearly spread. The serious one has evident swelling and exudation [1]. The infection of early burns and late scar ulceration can also complicate infectious eczema-toiddermatitis, so this also is a comparatively common clinical disease. However, there was no concerned report. Thirteen cases of complicated infectious eczema-toiddermatits caused by the infection of early burns and late scar ulceration have treated in the hospital. All the cases were treated with MEBT in nearly one year [2]. This therapy timely restrained the spread of eczema and inflammation, accelerated the healing of burns and scar ulcers and achieved significant curative effects. This was concerned with the pharmacological function of MEBO.

2. MEBO has the marked function of anti-histamine. According to the reports and introductions about the pharmacological functions of MEBO, MEBO can develop local microcirculations, improve local immunity, adjust the sensitivity of the nerve ending, as well as possess perfect analgestic, antipruritic and anti-infectious effects [3]. During the clinical observation of using MEBO to treat 13 cases of Infectious eczema-toiddermatitis, it was found that MEBO also has the marked function of anti-histamine.

3. MEBO has ideal function to drain pus and expel toxic substance, as well as clear necrotic tissue and promot tissue regeneration. According to the past clinical experience, the early infection of burns, especially the late infection of scar ulceration is a disease that requires more drug application, long treatment course and high treatment expenses. Besides, the patient will underwent more miserable suffering. During the clinical observation of MEBO in treating 13 cases of burns complicated with Infectious eczema-toiddermatitis, it was found that MEBO can keep the auto-drainage of wounds to constantly discharge necrotic tissues and exudates. Therefore, it removes necrotic tissues, restrains inflammation, promotes the development and growth of the epithelia on wound margin and survival follicular epithelial tissues [2,4], and finally promotes the focus heal as soon as possible.

4. It still is an open question that the treatment functions of MEBO for other dermatosis. Since some dermatosis caused by scratch also belongs to burns and ulcers, they are also coincident with the functional principle of MEBO. However, the curative effects of MEBO for these diseases should be further clinically proved.
References


【Brief Introduction of the Author】
Working for the Burn Wound & Orthopaedic Department, The People’s Hospital of Subei.