Fifteen Cases of Skin flap Necrosis Post Breast Cancer Operation Treated with MEBO

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[Abstract] Objective: To observe the efficacy of MEBO in treating skin flap necrosis post breast cancer operation. Method: 15 cases of this disease were treated with MEBO. Results: Necrosis in superficial layer was healed in 10 days. Small full-thickness skin necrosis healed in 3 weeks and skin necrosis with an area larger than 6cm × 7cm healed in 6 weeks. Conclusion: MEBO is very effective for treating skin flap necrosis post breast cancer operation. Skin transplantation can be avoided.

[Key words] MEBO; Necrosis of skin flap; Post breast cancer operation
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The necrosis of skin flap after breast cancer surgery is a common complication after radical breast cancer surgery or improved radical surgery with the incidence rate up to 50%-70% [1], which delays the implementation of general treatment plan; In the past, the general treatment method is routinely dressing change with long healing time, or skin grafting treatment. Since 2000, the hospital has applied MEBO for 15 cases of Necrosis of Skin Flap after Breast Cancer Surgery and yielded obvious efficacy. The summary report is given below:

1. Clinical data

1.1 General information: Females between 35 to 75 years old with average age of 49 years old were included in this group. All of the tumors were individually occurred, including 10 cases in the left breast (67%) and 5 cases in the right breast (33%). TNM stages division standard of AJCC / UICC in 1987 was adopted in the clinical stages division: 65 cases of II b (33%), IIIa7 cases) (47%), 3 cases of IIIb (20%). Operation method: 10 cases of radical breast cancer surgery (67%), 5 cases of improved radical surgery (33%), 13 cases necrosis of skin flap at the side of axillary region namely external side (87%) and 2 cases of necrosis at the side of breast bone (13%). The range of necrosis varied from 1cm × 1 cm² - 6×7cm²

1.2 Treatment method and result: All patients in this group were treated with MEBO after necrosis of skin flap with the ointment directly applying to the position of necrosis of skin flap and implementation of exposed therapy. The patients with necrosis of cuticular layer were healed in about ten days; the patients with small area necrosis of full layer (not exceeding 2 cm² in the vertical diameter of incision, or not exceeding 2cm in the diameter of island...
necrosis) were healed within three weeks or so; and the patients with area of necrosis between $6\text{cm} \times 7\text{cm}$ were healed in four to six weeks or so.

2. Discussions

2.1 General therapy: in the past, the patients with necrosis of cuticular layer after breast cancer surgery were treated with microwave therapy unit or far-infrared ray light etc. by locally physical therapy so as to promote the blood circulation. When water-blisters formed, it was punctured and extracted and wet dressed with 75% alcohol gauze, which should be replaced every twelve to twenty-four hours. For small area full layer necrosis, in case of obvious boundary between necrosis area and skin around, the necrotic skin should be cut off completely, and then through wet dressing, dressing change and antibiotics application etc., the subcutaneous granulation tissue would grow healthily. Then the epidermis would heal from the periphery tissue centripetally. For the large area full layer necrosis, in case of obvious boundary between necrosis area and skin around, the necrotic skin and necrotic tissue should be cut off, and then through wet dressing, dressing change and antibiotics application etc., granulation tissue would grow healthily and flat with skin around. If no infection indication appears, medium and thick skin of corresponding size should be taken from the external side of thigh for skin grafting treatment\textsuperscript{[2]}.  

2.2 MEBO treatment: According to our clinical practice, application of MEBO on the position of necrosis of skin flap is not only able to maintain the physiological environment of wounds, but also able to liquefy and eliminate the necrotic tissue without damage; Which shall not only control the damage of bacteria and toxin to the wounds, but also supply cell culture base for regeneration of skin tissue of wounds; not only remove the metabolic products of wounds, but also supply necessary nutrient content for wounds and create physiological environment of regeneration\textsuperscript{[3]}. The patient shall select to receive treatment in hospital or at home, which shall reduce the expenses of dressing change and anxiety of skin grafting accordingly and shorten the process of healing of necrosis of skin flap. It is an effective treating method to treat skin flap after breast cancer surgery with MEBO, which provide condition for comprehensive treatment of radiotherapy, chemotherapy etc.

References


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