

## Pressure Ulcers Healing Effects of Chuangling Liquid: Rats Model Based Analysis

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**SUMMARY.** The aim of this study was to evaluate Chuangling liquid (TCM), a new topical therapeutic agent for the treatment of pressure ulcers. Sixteen Sprague Dawley rats were selected and randomly divided into 4 groups with 4 rats in each group (n = 4). Rats with pressure ulcer were treated with physiological saline, Chuangling liquid (low dose of *Abelmoschus manihot*), Chuangling (high dose of *A. manihot*) and 50 mg recombinant human vascular endothelial growth factor 165 (rhVEGF<sub>165</sub>). The proliferation and regeneration of epithelial cells in granulation tissue was assessed in 3, 7, 14, and 21 days after treatment. It was found that Chuangling liquid with high dose of *A. manihot* significantly (p ≤ 0.05) promotes wound healing. The results indicate that Chuangling liquid could be a potential treatment for pressure ulcer in clinical setting.

**RESUMEN.** El objetivo de este estudio fue evaluar el líquido Chuangling (MTC), un nuevo agente terapéutico tópico para el tratamiento de las úlceras por presión. Se seleccionaron dieciséis ratas Sprague Dawley y se dividieron aleatoriamente en 4 grupos con 4 ratas en cada grupo (n = 4). Las ratas con úlcera por presión se trataron con solución salina fisiológica, líquido Chuangling (dosis baja de *Abelmoschus manihot*), Chuangling (dosis alta de *A. manihot*) y 50 mg de factor 165 de crecimiento endotelial vascular humano recombinante (rhVEGF<sub>165</sub>). La proliferación y regeneración de células epiteliales en tejido de granulación se evaluó a los 3, 7, 14 y 21 días después del tratamiento. Se encontró que el líquido Chuangling con altas dosis de *A. manihot* promueve significativamente (p ≤ 0.05) la cicatrización de heridas. Los resultados indican que el líquido Chuangling podría ser un tratamiento potencial para la úlcera por presión en un entorno clínico.

**KEY WORDS:** animal model, chuangling liquid, pressure ulcer, wound healing.

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