**NEW CONCLUSIONS OF DOCTOR THESIS**

**Thesis title**: ***“Study therapeutic effect of TG extract on chronic skin ulcers”***

**Code**: 62 72 02 01 **Speciality**: Traditional medicine

**Research fellow:** Lương Thị Kỳ Thủy

**Instructors**: 1. Assoc. Prof., M.D.,Lê Đình Roanh

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**Training institute**: Military Institute of Traditional Medicine – Ministry of Defense

**The thesis’ new conclusions:**

- This is the first study of TG extract in vivo and in vitro in Vietnam.

- The thesis provides the results of composition, acute and subchronic toxicity, hypotheses about the mechanism of action, therapeutic effect of TG extract on experimental and clinical chronic skin ulcers.

**1. Results about the chemical composition and safety of TG extract**

-TG extract contains polyunsaturated fatty acids: arachidonic acid, docosahexaenoic acid, oleic acid, linolenic acid and cholesterol.

- TG extract did not causen irritation and acute toxicity by oral, subcutaneous and topical administrations.

- Topical TG extract did not caused subchronic toxicity at clinical dose (4,8 g/kg/day) and triple dose (14,4g/kg/day) in 90 days trial under the OECD guidance (1981).

**2. Results about effect of TG extract on experimental chronic ulcers in rabbits**

-TG extract has effective treatment for chronic skin ulcers in experimental animals: Average time to completly healing is 22.3±2.9 days; The ulcers size reduced faster (p <0.01; p <0.05), higher rate of completly healing (p <0.01) when compared to the control group.

- The DESIGN detail critera (size of granulation tissue, necrosis, discharge) and total score of ulcers that were treated with TG extract reduced signficantly faster, compared to the control group (p <0.01 ).

- Histopathological, ultrastructural and immunohistochemical results show that TG extract helped healing experimental chronic skin ulcers because of stimulating migration and activation of fibroblasts, increasing proliferation synthetic extracellular matrix, angiogenesis and re-epithelialization, decreasing activity of MMP9 and extracellular matrix destruction.

**3. Results of clinical therapeutic effects of TG extract on chronic skin ulcers stage II, III.**

Clinically, TG extract has effective treatment for chronic skin ulcers stage II, III, the average treatment duration is 25.67±14.34 days. The rate of the DESIGN total score reduction more than 50% is 89.1%. The percentage of significant reduction in ulcer size reached 90.6%. The general percentage of ulcers complete healing were 78.1%. The percentage of ulcers complete healing of ulcer size <400 mm2 and 400mm2 to <1600mm2 were 100% and 94,4% respectively.

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| **Instructor**  **Assoc. Prof., M.D. Lê Đình Roanh** | *Hanoi, May 18th 2016*  **Research fellow**  **Lương Thị Kỳ Thủy** |