

# The Effect of ‘Gua Sha’ Treatment on the Microcirculation of Surface Tissue: A Pilot Study in Healthy Subjects

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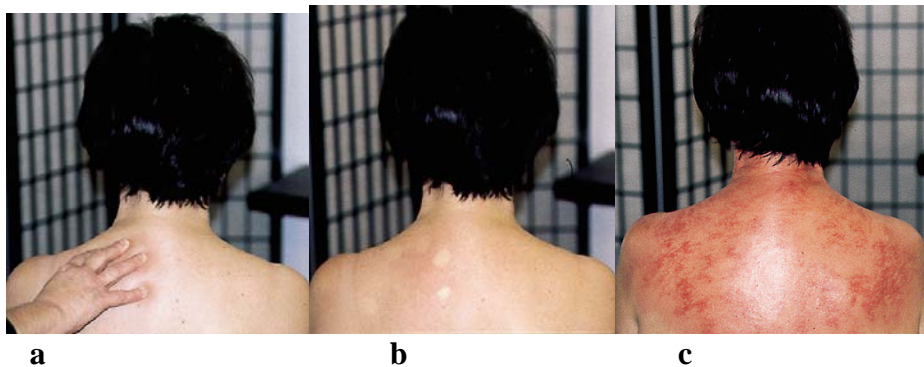
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**BACKGROUND** Gua sha (aka: cao gio, coining) is a traditional East Asian healing technique that uses surface frictioning to intentionally raises transitory petechiae and ecchymosis, There are case reports in Western literature, but no studies on the physiology of Gua sha [1].

**METHODS** Laser Doppler imaging was used to make sequential measurements of the microcirculation of surface tissue before and after Gua sha treatment in eleven healthy subjects, Changes were expressed from baseline in arbitrary perfusion units (PU). Change in myalgia was subjectively reported and confirmed by manual palpation.

**RESULTS** Gua sha caused a 4-fold increase in surface microcirculation at the treated area for the first 7.5 minutes and a significant increase in microcirculation during the entire 25 minutes of the study period following treatment ( $p < 0.001$ ). Each subject experienced immediate decrease in myalgia that persisted to some extent to the follow up visit. There were no adverse reactions.

**CONCLUSIONS** Gua sha increases microcirculation local to a treated area which may play a role in local and distal decrease in myalgia. There is an unidentified pain relieving biomechanism associated with Gua sha.



Pressing palpation (a), resulting in blanching (b), that is slow to fade signifies ‘sha stasis’ an indication for gua sha; (c) is the same patient after gua sha. [2]

## REFERENCES

- [1] Nielsen A, Knoblauch NTM, Dobos GJ, Michalsen A, Kaptchuk TJ. The Effect of Gua Sha Treatment on Surface Microcirculation: A Pilot Study in Healthy Subjects. *Explore, J of Science and Healing*, 2007 (in press).
- [2] Nielsen A. *Eine Traditionelle Technik für die Moderne Medizin*. Kötzing, Germany: Verlag für Ganzheitliche Medizin; 2000.