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Title:

**Methylfolate Palliates Pain in Chronic Stasis Ulcers Under
Treatment with Elastic Compression**

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Introduction:

Oral methylfolate (*) is indicated for the treatment of diabetic neuropathy and commonly palliates the pain accompanying diabetic neuropathy. (1) The mechanism of methylfolate is increased capillary blood flow to the long neurons. Folate, elevates endothelium nitric oxide, NO, a gaseous free radical. NO dilates the capillary smooth muscle and blood flow increases. Nitric oxide is a critical mediator of normal tissue repair, (2) L-methylfolate increase endothelial tetrahydro-L-biopterin, an enzyme cofactor that increases NO production from arginine. We observed that patients taking methylfolate seemed to have less pain from elastic compression of chronic stasis ulcers. This study asks, "Does oral methylfolate palliate wound pain?"

Methods:

Seven patients treated in a community wound care clinic for chronic painful wounds were given oral methylfolate for four weeks. Most patients were treated continuously with yarn focused elastic compression for control of limb edema.(**) No changes were made in the pain treatment regime. Patients were treated with multiple combinations of oral narcotics, OTC pain medications (e.g. aspirin or acetaminophen), antidepressants (e.g. bupropion) and low dose tricyclic antidepressants prescribed specifically for chronic pain. After four weeks, patients were allowed to choose to continue methylfolate replacement or not, based on the individual's perception of efficacy.

Findings:

Patient assessment of wound pain documented at each wound center visit with a protocol. Wound healing in each subject is documented with color photographs.

Conclusions:

Oral methylfolate may palliate pain in chronic leg ulcers treated with elastic compression in a community wound clinic.

References:

1 VanEtten, R.W., et al, Impaired NO-dependent vasodilation in patients with Type II (non-insulin-dependent) diabetes mellitus is restored by acute administration of folate. Diabetologia 2002; 45:1004-1010.

2 Schwentker, A., Nitric oxide and wound repair. Surg Clin North Am. 2003; 83(3):521-530.

* Metanx®, PamLab, LLC, Covington, LA

** EdemaWear®, Compression Dynamics LLC, Omaha, NE