MYOFASCIAL - MANUAL LYMPHATIC DRAINAGE VERSUS PRESSURE MASSAGE IN BURN TRAUMA WOUND HEALING (013)

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Introduction: Lymphatic system (LS) is one of the major focuses of current medicine. The emphasis is placed on its function from the point of view of both functional pathology and immunology [1]. But the accurate circulation function is also the alpha and omega in treating posttraumatic, especially postoperative conditions, and in wounds healing, too.

Methods: Verification of manual therapies is done by pressure algometer. If possible, scanned on lymphoscintigraphy [2], with static view before and after treatment.

1) In the range of manual therapies of Dynamic Insufficiency of LS, the Manual Lymphatic Drainage (MLD) (applied following appropriate guidelines and standards for the method) is contraindicated. That is why we use Myofascial - manual lymphatic drainage (M - MLD) - a new manual therapy using the synergy of myoskeletal medicine techniques (soft techniques) and MLD techniques. Based on a clinical examination, both functional pathology of LS (lymphostasis predominantly in regional nodes) [2] and secondary functional pathologies of soft tissues (ST) are affected. Its application is complementary to a complex therapy of burn trauma.

2) Pressure massage

Other helpful complementary methods:

3) Acupuncture

4) Bio-psycho-social help

Boy, 5 years, boiled by hot water, mm. add. hip.

Picture: Lymphostasis of inguinal nodes and TrPs.

M - MLD Versus Pressure massage:

1, Classical pressure massage uses high pressure (80 - 120 mm Hg, 10,64 - 15,96 kPa). The pressure is applied in the area of pathological barrier of ST.

2, It is painful (it can irritate recourses of trauma in central nervous system), which can result in multiplication of connective tissue and in development of hypertrophic scar as part of the defence mechanism of the body.

3, Immunology view

M - MLD:
1. Uses lower pressure (25 - 45 mm Hg, 3.33 - 5.6 kPa), in hypertrophic and keloid scars (60 - 80 mm Hg, 7.98 - 10.64 kPa) in physiological barrier of ST.

2. Is painless, soft

3. Respects the lymph flow, does not disrupt the peripheral collateral lymph circulation

**Results, discussions:** Experience with 229 patients with burns and scalds of IIa, IIb - III degrees, treated at the department of Burn and plastic surgery clinic, University hospital Brno - Bohunice (2008). This patient group ranged between 6 months and 81 years of age, while 89 % of patients were children aged 1 - 18 years. Most frequently, the burn or scald degrees were between IIa - IIb, namely from 1 to 11 % TSBA.

**Conclusion:** Timely application of this new physiotherapeutic manual approach “M-MLD” shouldn’t be too difficult to be applied by trained nurses when treating wounds. It is neither economic demanding or time-consuming, thus eliminating the risk of an edema and secondary inflammation. Such a comprehensive treatment of wounds importantly contributes to the reduction of hypertrophic scarring and negative after-effects. It also reduces therapy costs, the development of psychosocial impal and contributes to the preventiv of medical-law disputes as well.

(In December 2014, Ministry of Health of the Czech Republic recognised M - MLD as a new manual approach used with in the complex therapy of wound healing)

**References:**
