



## Résumés d'articles publiés dans la revue « Phlebology » Volume 28 ; Number 7 : October 2013

### Review article

#### Polidocanol foam sclerotherapy of persisting postoperative seromas after varicose vein surgery: a series of six cases.

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#### Abstract:

**Objective:** The aim of our case series was to show the therapeutic effect and the safety of the use of polidocanol foam in ultrasound-guided sclerotherapy treatment of relatively small postoperative seromas after varicose vein surgery.

**Methods:** We treated six patients with postoperative seromas after varicose vein surgery that were refractory to conventional treatments including compression dressings, repeated needle aspirations and manual lymph drainage.

**Results:** A complete regression of the fluid collections was seen after one and two ultrasound-guided injections of polidocanol foam into the seroma cavity in two cases, respectively. Up to five treatment sessions and up to four further needle aspirations were necessary for the remaining two patients until complete regression of the seromas. No side-effects were reported.

**Conclusion:** This is the first case series to report of the regression of postoperative seromas after varicose vein surgery induced by polidocanol foam sclerotherapy.

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### Review article

#### The relative impact on leg symptoms of fears of getting varicose veins and of great saphenous vein reflux.

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#### Abstract:

**Objective:** To assess possible links between fears of getting varicose veins and unknown great saphenous vein reflux with the prevalence and features of leg symptoms in healthy people and patients with varicose veins.

**Methods:** Questionnaire and venous ultrasound in healthy volunteers and patients with great saphenous vein (GSV) incompetence.

**Results:** Intensity of feelings of swelling and heaviness (S&H; scale 0-3) was 0.26 ( $\pm 0.51$ ) in healthy people without fears of varicose veins ( $n = 162$ ), 0.56 ( $\pm 0.72$ ) in the presence of GSV reflux ( $n = 39$ ,  $P = 0.001$ ), 0.73 ( $\pm 0.77$ ) in the presence of fears of varicose veins ( $n = 43$ ,  $P < 0.001$ ), 0.95 ( $\pm 0.98$ ) in the presence of both findings ( $n = 10$ ,  $P = 0.002$ ) and 0.73 ( $\pm 0.91$ ) in patients ( $n = 40$ ,  $P < 0.001$ ). Intensity of S&H was higher in women ( $P < 0.001$ ) and in the presence of a family history of varicose veins ( $P = 0.003$ ).

Fears had a large influence on S&H ( $F = 12.38$ ,  $P < 0.001$ ) while GSV reflux was less important ( $F = 4.58$ ,  $P = 0.033$ ). Fears and GSV reflux were not related to each other ( $r = -0.01$ ,  $P = 0.933$ ).

The prevalence of a crawling sensation was equal in all study groups and cramps were more frequent in volunteers than in patients with GSV reflux ( $P < 0.001$ ).

**Conclusions:** Healthy people with fears of getting varicose veins experience feelings of leg S&H as frequently as subjects with previously unknown GSV incompetence and patients with manifest varicose veins.

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Review article

**Disability caused by multiple sclerosis is associated with the number of extra cranial venous stenoses: possible improvement by venous angioplasty. Results of a prospective study.**

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**Abstract:**

**Objective:** Chronic cerebrospinal venous insufficiency (CCSVI) was recently described in patients with multiple sclerosis (MS). The hypothesis of the vascular aetiology provides a new approach in the investigation and treatment of MS.

**Methods:** Our open-label study included 94 MS patients who fulfilled ultrasound sonographic criteria required for CCSVI. The internal jugular and/or azygous veins by a catheter venography were dilated.

**Results:** In 34.8% of the patients unilateral, in 65.2% bilateral venous abnormalities and in 2.1% no luminal obstructions were demonstrated. The patient group with the higher disability score had a significantly higher number of venous lesions ( $P < 0.005$ ). Significant improvement of clinical disability in relapsing-remitting patients was ( $P < 0.001$ ) achieved. In our study no stents were used. Re-stenosis occurred in 21.7% of the patients.

**Conclusion:** The number of venous narrowings is higher in more disabled patients. A significant improvement in clinical disability in the relapsing-remitting group was observed.

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Review article

**Heterotopic ossifications in chronic venous insufficiency: a new consideration for clinical, aetiology, anatomy and pathophysiology staging.**

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**Abstract:**

**Objectives:** Heterotopic ossification is defined as the abnormal formation of true bone within extra-skeletal soft tissues. It may be associated with a variety of clinical conditions, but is most frequently seen with musculoskeletal trauma, neurologic injury or genetic abnormalities. It has also been described in patients with chronic venous insufficiency; however, it often goes underdiagnosed due to chronic ulceration that masks exam findings. To date, few reports of heterotopic ossification due to chronic venous disease exist within the literature with the most recent dating back to the 1970s.

**Methods:** We present a case study of a man presenting with extensive leg ulceration and a history of chronic venous insufficiency. He had a large non-healing venous stasis ulcer of the left lower extremity with extensive heterotopic ossification discovered intraoperatively.

**Results:** The patient was managed with serial wound debridement, innovative woundcare and eventual split thickness skin grafting that achieved limb salvage despite the complexity of his wound.

**Conclusions:** Our discussion focuses on the epidemiology, pathophysiology, diagnostic work-up and management of heterotopic ossification in the setting of chronic venous insufficiency. We propose that heterotopic ossification be included in any future modifications of the clinical, aetiology, anatomy and pathophysiology system classification as a complication of chronic venous disease.

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Review article

**Role of matrix metalloproteinases in non-healing venous ulcers.**

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**Abstract:**

Chronic venous ulceration (CVU) of the lower limbs is a common condition affecting 1% of the adult population in Western countries, which is burdened with a high complication rate and a marked reduction in the quality of life often due to prolonged healing time. Several metalloproteinases (MMPs) such as MMP-9 together with neutrophil gelatinase-associated lipocalin (NGAL) appear to be involved in the onset and healing phases of venous ulcer, but it is still unclear how many biochemical components are responsible for prolonged healing time in those ulcers. In this study, we evaluate the role of MMP-1 and MMP-8 in long lasting and refractory venous ulcers. In a 2-year period we enrolled 45 patients (28 female and 17 male, median age 65) with CVU. The enrolled population was divided into two groups: group I were patients with non-healing ulcers (ulcers that had failed to heal for more than 2 months despite appropriate treatments) and group II were patients with healing ulcers (ulcers in healing phases). MMP-1 and MMP-8 were measured in fluids and tissues of healing and non-healing ulcers by means of enzyme-linked immunosorbent assay (ELISA) and Western blot analysis, respectively. In particular the patterns of the collagenases MMP-1 and MMP-8 in healing wounds were distinct, with MMP-8 appearing in significantly greater amounts especially in the non-healing group. Our findings suggest that MMP-1, and MMP-8 are overexpressed in long lasting CVU. Therefore, this dysregulation may represent the main cause of the pathogenesis of non-healing CVU.

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