

**ULCUS CRURIS VENOSUM – ECHOSONOGRAPHIC AND ULTRASOUND EXAMINATION**

Javorka Delic

*City Institute of Dermatology, Belgrade, Serbia*

**Introduction:** Clinic markers of the Ulcus cruris venosum (UCV) are varicose veins, lymphoedema and dermatosis (stage C5<CEAP) classification of the chronic venous insufficiency. This clinic image is a consequence of the chronic veins hypertension, tissues perfusion reduction, chronic cellular inflammation, proliferation and sclerosis connective and fat subcutaneous tissue (Stasis dermatitis, Lipodermatosclerosis). Collateral varicose veins and lymphoedema are a consequence of the veins blood reflux from deep veins to perforating and superficial veins.

**Aim:** The aim of this study is evaluation status of the veins, skin and lymphoedema at patients with UCV.

**Method:** We have examined 60 patients (41 female and 19 male; average age: 50). Color Duplex scan – CDS (Acuson Aspen) ultrasound examination of the soft tissue of the leg (My cab 50 EsaoteBiomedica) and values of lymph index.

**Results:** CDS examination to confirmed: Insuff. Vv. perf. Cocketti – 56 (94%) - five bill.; Insuff. VSM – 41 (68%); Insuff. VSP – 7 (11%); Collateral varicose veins 43 (72%); Insuff. VF Comm. – 8 (13.5%); Insuff VF spfc - 5 (9%); Insuff. V. Poplitea 19 (18,5%); Insuff. V. tib. post.; 6 (10%); Insuff. V. peron. – 4 (6%); Insuff. V. musc. Solei 2 (3,5%); Strpping/Ligat. VSM – 10(14%).

We have diagnosed Lymphoedema at 46 (76%) patients, at 13 (20%) patients we have found the value of the lymph index over 25%. The lymphoedema has high influence on the granulation and on the time of healing of the UCV (Spirman non parameter correlation:  $r = 0,593$ ,  $r = 5,512$ ).

Ultrasound examination of the skin: Cellular inflammation of the cutis - 42 patients (70%); Oedema of the dermis – 42 patients (70%); Nodular hyperplasia of the sc tissue -14 patients (23%); Fibrosis of the sc tissue with calcium accumulation - 10 patients (16%).

**Discussion and Conclusion:** We have found multisystemic insufficiency of the veins with domination of insufficiency of the perforant veins, VSM and deep subinguinal veins. There is direct correlation between insufficiency of the perforant veins, skin changes and UCV (Bacher, Penfold, Labropulos). Also, skin changes and lymphoedema reflects range degree of the vein reflux and stasis (Karlsmark, Romanelli, Sepp). This examinations are very important because possibility of determination of the effective therapy – surgical, medication or compressive therapy and also for therapy evaluation.

Key words: Ulcus cruris venosum, echosonographic, ultrasound diagnostic, lymph index