

## CRUROSCOPY WITH ENDOSCOPIC SUBFASCIAL DISSECTION OF PERFORATORS – OWN EXPERIENCE

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**Introduction.** Recently, subfascial endoscopic perforator vein surgery (SEPS), and more specifically endoscopic subfascial dissection of perforators (ESDP), has become an effective minimally invasive method for healing and preventing recurrent venous ulceration.

**Aim.** To present the technique of cruroscopy with endoscopic subfascial dissection of perforators and to evaluate its effectiveness in treating chronic lower limb venous insufficiency on the basis of 400 performed surgeries.

**Materials and methods.** Between August 1999 and December 31, 2009, in the Department of General and Minimally Invasive Surgery with Sub-department of Urology at the County Hospital in Bartoszyce and the Department of General and Minimally Invasive Surgery at the Warmia and Mazury University Hospital in Olsztyn, 479 cruroscopies with ESDP were performed, utilizing laparoscopic optical system (diameter of 10 mm, visual angle of 0°) and entry through 2 trocars (10 mm) inserted directly into the subfascial space. Carbon dioxide was then insufflated and pressure was increased up to 15 mmHg. Surgeries were performed without a thigh compression cuff, initially using titanium clips, and since 2004 a harmonic scalpel or Liga-sure. Patients were qualified for the surgery following the performed Doppler imaging. Patients who underwent surgeries presented venous insufficiency classified as: III – 86 limbs, IV – 92, V – 91, VI – 131. The presented analysis covers 400 operated on extremities.

**Results and discussion.** Complete healing of ulceration in patients with class VI venous insufficiency was achieved within 2–8 weeks. There were no significant early or late complications. In 8.0% of patients we observed recurrence of ulceration, and in 12.0% medial ankle paresthesia, subsiding after 6–8 weeks. Wound healing complications after trocar insertion were observed in 0.3% of patients, and local hematoma in 1.2%.

**Conclusions.** 1. Cruroscopy with SEPS/ESDP is an effective and safe method for treating chronic lower limb venous insufficiency. 2. Utilization of laparoscopic optical system and subfascial CO<sub>2</sub> insufflation enable a very good identification of perforator veins and their safe reparation. 3. Gaining experience contributes to minimizing intraoperative complications. 4. Cruroscopy with SEPS/ESDP along with supplementary techniques is a recommended method for treating ulceration in the course of chronic lower limb venous insufficiency.