

## LEG-ULCER COMPRESSION THERAPY: A HOSPITAL'S EXPERIENCE

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**Aim:** Presentation of results on the application of compression therapy in leg-ulcer patients at a hospital.

**Methods:** Descriptive retrospective study on the cases and results relating to the use of Compression Therapy (CT) in Leg-Ulcer (LU) patients. Information was gathered on the total number of LU patients who underwent CT, mean age distribution, sex, comorbidities, ulcer type, location, development time, Total Ulcer Area of patient (TUA = sum of surface area of all leg ulcers in each patient in cm<sup>2</sup>), mean compression-therapy application time, number of hospital admissions (where admission occurred), number and type of surgical operations supporting treatment, number of ulcer relapses, and microbial profile of infected ulcers.

The TUA mean monthly variation was also analysed from the start of CT until full healing or, in patients still undergoing CT, until 31 December 2007.

**Results:** CT consisted of applying the dressing first (dressing compresses with the composition most appropriate to the ulcer characteristics) followed by short stretch bandages or compression stockings. It was applied to all leg-ulcer patients who had no evidence of peripheral arterial pathology, with an ABPI > 0.8, and whose social conditions were suitable for correct application of the treatment.

103 LU patients were subjected to CT (83 fully healed, 21 still undergoing CT); 65 women and 38 men aged between 29 and 89, with an average age of  $64.4 \pm 12.4$ . The most frequent comorbidities were included HTA (30%), cardiac pathology (12%), diabetes mellitus (10%), and obesity (7%). Ulcer aetiology was mostly venous - 90%. The mean ulcer growth time (prior to the 1st observation) was  $34.4 \pm 77.9$  months [1.480] months. 27% of patients had multiple ulcers. The ulcers were mostly located on the left leg (53%) on the inner side (34%). Mean TUA on admission was  $22 \pm 43$  [0.5, 347].

The main microbiological profile of the exudate of infected ulcers (31% of leg ulcers) was as follows: 50% *Staphylococcus aureus*, 10.8% *Streptococcus agalactae*, 10.9% *Proteus mirabilis*, 10.9% *Pseudomonas aeruginosa*.

CT was applied for an average time of  $5.6 \pm 5.2$  months [1, 22] months until full healing (this value related only to the 82 fully healed patients). TUA mean monthly variation for all 103 patients who underwent CT was  $4.3 \pm 7.4$  [-49.6, 0.1]. 9 complementary operations were carried out, 6 for Surgical Cure of Varicose Veins and 3 for the application of skin grafts.

There was a 3.9% ulcer relapse rate, all with accompanying infection.

No CT complications were reported.

**Discussion:** CT is a therapeutic approach that has turned out to be an effective response in a short time, which can be seen in the negative value of the TUA mean monthly variation ( $-4.3 \pm 7.4$ ) in patients undergoing compression therapy. The results described are the first for the hospital being studied and will serve as a basis for future targeted studies.