



## The relationship between clinical severity and functionality in patients with chronic venous insufficiency

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### Abstract

**Background:** Chronic venous insufficiency (CVI) is a chronic progressive disease characterized with dilated veins, edema, leg pain, paresthesias, muscle cramps and cutaneous changes in the lower extremity. It is not clear that if these symptoms decrease the functionality of patients.

**Objective:** The aim of this study was to evaluate the relationship between clinical severity and functionality in patients with CVI.

**Method:** A total of sixty patients (female: 19, male: 41) with CVI from the Department of Cardiovascular Surgery, were included in the study. All the patients were assessed with Venous Clinical Severity Score (VCSS) for clinical severity, Visual Analogue Scale (VAS) for pain in rest/activity/night, lower limb circumference measurements for edema, 6 minute-walking test (6MWT) for functional capacity, and Lower Extremity Functional Scale (LEFS) for functionality.

**Results:** The mean age of the patients was  $45.83 \pm 13.25$  years, while the mean duration of the disease was  $8.30 \pm 7.42$  years. The clinical levels of the patients were C<sub>2-6</sub> (C<sub>2</sub>=7; C<sub>3</sub>=14; C<sub>4</sub>=2; C<sub>5</sub>=3; C<sub>6</sub>=34) according to the Clinical, Etiologic, Anatomic, and Pathophysiologic (CEAP) classification. There was significant positive correlation between VCSS and all pain scores (VAS-rest:  $p=0.002$ ,  $r=0.39$ ; VAS-activity:  $p=0.002$ ,  $r=0.39$ ; VAS-night;  $p=0.01$   $r=0.30$ ). Also, there was positive correlation between VCSS and edema (right lower limb:  $p=0.02$   $r=0.28$ ; left lower limb:  $p=0.007$   $r=0.34$ ). There was no significant correlation between VCSS score and 6MWT, LEFS ( $p>0.05$ ).

**Conclusions:** As a result of this study, it was concluded that there is no relationship between clinical severity and functionality in patients with C<sub>2-6</sub> CVI. On the other hand, it was seen that there may be an increase in pain and edema with the disease progresses. We think that

the factors affecting functional capacity should be investigated according to disease relation and with or without venous ulceration.

## **Biography**

Saliha Gurdal Karakelle is a young physiotherapist who specializes in cardiovascular physiotherapy. She has completed her MSc at the age of 26 years from Istanbul University-Cerrahpasa and has been studying Ph.D from same university. She has submitted 20 papers on Congress in the field of Physiotherapy and Rehabilitation and some of these papers were published reputed journals. Her main research interest focuses on “Exercise therapy in venous insufficiency”.

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