

**INFLUENCE OF COMPRESSION CYCLE TIME AND NUMBER OF SLEEVE CHAMBERS ON UPPER EXTREMITY LYMPHEDEMA VOLUME REDUCTION DURING INTERMITTENT PNEUMATIC COMPRESSION**

**U. Pilch, M. Wozniowski, A. Szuba**

Faculty of Physiotherapy (UP,MW,AS), University of Physical Education, and Department of Internal Medicine (AS), Wrocław Medical University, Wrocław, Poland

*ABSTRACT*

*The cycle time and number of chambers in the pneumatic sleeve may influence the outcome of lymphedema therapy with intermittent compression devices. The aim of our study was to assess efficacy of several commonly used different IPC protocols on edema volume reduction in women with postmastectomy lymphedema. Sixty-seven (57) women with secondary arm lymphedema (age 39-80) were selected to the study. Women were randomly assigned to two study groups with different IPC cycle times: I – 90:90s and II – 45:15s. Both groups were then randomly divided into two subgroups with different sleeves: A – 1 chamber sleeve (28 women) and B – 3 chamber sleeve (29 women). All women underwent IPC treatment for 5 weeks, 5 times a week for 1 hour (25 sessions). Arm volume measurements were performed before and after each IPC session. Significant reduction of edema volume was observed in all therapeutic subgroups, regardless of cycle times and number of chambers. In the group with short IPC cycle, better efficacy was noticed with 3-chamber sleeve. IPC is an effective method of volume reduction in women with postmastectomy arm lymphedema regardless of cycle times and number of sleeve chambers.*