

Compliance of compression garment in 2-year follow up of lymphedema

Young Je Kim^{1*}, Dong-KI Min², Han seong Choe³, Soyoung Lee^{1†}

Keimyung University Dongsan Medical Center, Department of Rehabilitation Medicine¹, Daegu Health College, Department of Physical Therapy², Catholic University of Daegu, Department of Physical Therapy³

Introduction

In patients with have lymphedema, the major goal of lymphedema treatment is to reduce edema volume in the long term and to maintain reduced state. Currently, Complex decongestive therapy is recognized as a standard lymphedema treatment. Among them, Self-management with compression garment is considered to be an important part of the patient's ability to control lymphedema and carry on with the treatment techniques implemented by professionals. The aim of this retrospective study was to investigate the compliance of compression garment in lymphedema patients who were admitted and educated self bandage.

Materials and Methods

This study included patients with arm lymphedema or leg lymphedema between January 1, 2013 and December 17, 2016. The inclusion criteria for this study were: 1) patients who were able to self-bandage at discharge and 2) patients who were followed up for more than one year after bandage education. A total of 75 patients were enrolled at one year follow-up and 58 patients for two year follow up in the study. The following clinical characteristics were obtained from retrospective chart review : Age, Sex, Location of lymphedema (arm or leg), Site of lymphedema (right or left) , Maximal circumference difference [MCD] (at admission/ at discharge / after 6 months / after 12 months / after 24 months) , types of compression garment (after 6 months / after 12 months / after 24 months) The limb circumferences were estimated using a measuring tape in five areas. Then, the maximal circumference differences (MCD) at the uppermost symptomatic areas were calculated.

Results

Our study comprised 75 patients with lymphedema. They consisted of 67 women and 8 men. Upper extremity lymphedema was present in 49 patients, and the remaining 26 patients had lower extremity lymphedema. The mean age of patients was 54 years. 89% of patients population was still performed their bandage or stocking as instructed six month after discharge, 91% one year and 88% two year after discharge. The bandage was most frequently used type of compression garment during all follow-up period (Figure 1). When upper and lower extremities were analyzed separately, bandage was most frequently applied methods for 2-year follow-up periods in the upper extremity. In contrast, stocking was more frequently applied than bandage since 12months after discharge in lower extremity.

Conclusion

Patients with lymphedema who had the opportunity of being adherent to the compression garment during two years following their initial treatment were achieving their maximal volume reduction effect after discharge. It seems that comprehensive instruction is required after discharge and that periodic reviews are necessary for their compliance and adherence to compression garment for lymphedema.

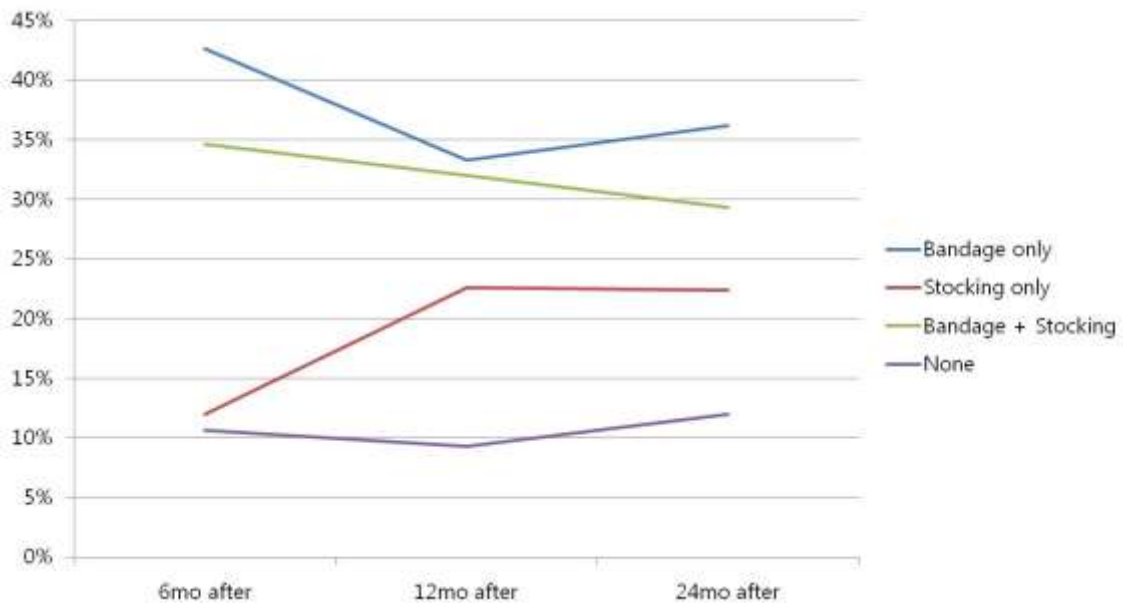


Fig.1 Rate of applying to compression garment. (all patients, n=75)

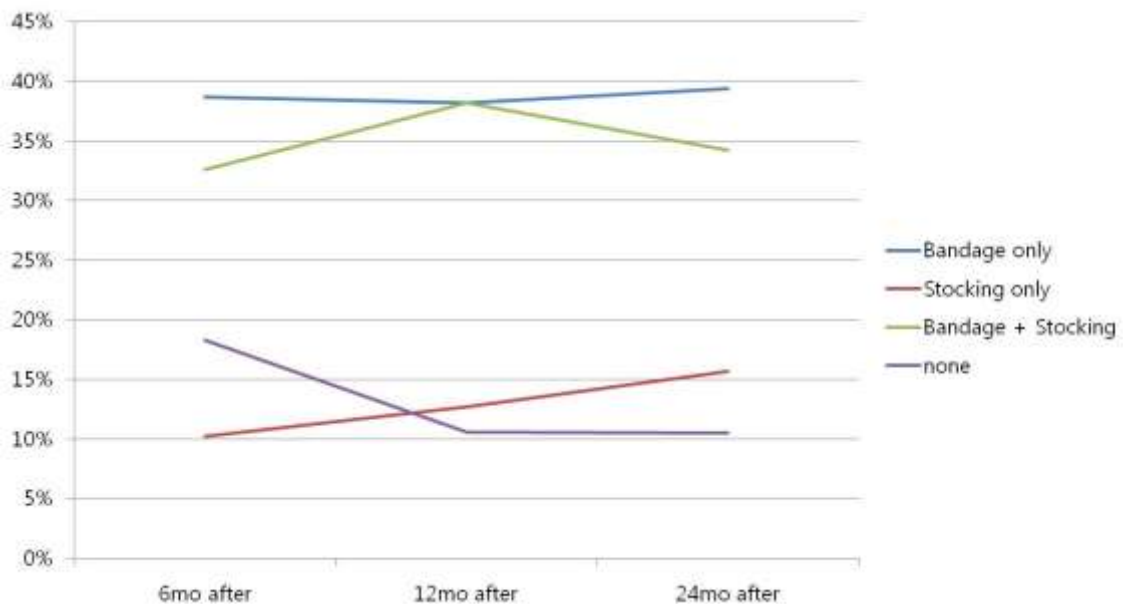


Fig.2 Rate of applying to compression garment. (Upper extremity patients, n=49)

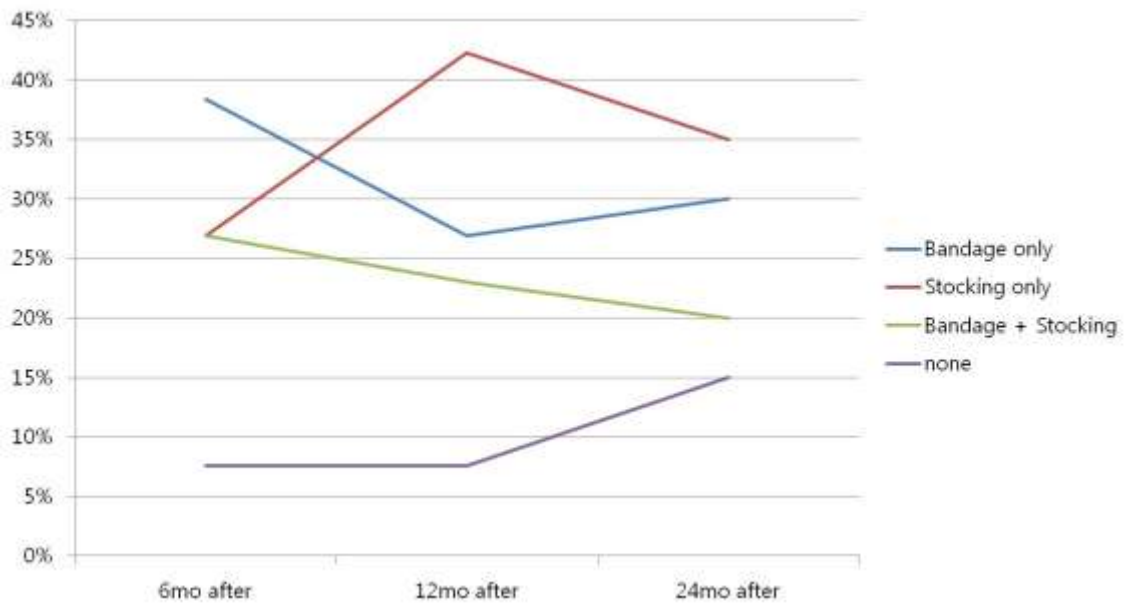


Fig.3 Rate of applying to compression garment. (Lower extremity patients, n=26)