

Effects of low-dye taping on improvement of symptoms and changes in gait plantar pressure in plantar fasciitis patients

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Plantar fasciitis is the most common cause of pain in heels. Although it is encountered in clinical setting, it is a disease with low compliance of patients at the time of treatment since it is difficult to find treatments that result in satisfactory improvement in symptoms. This Study aims to examine the effectiveness of low-Dye taping by analyzing the improvement of symptoms, whether there is improvement in the functional aspect and the changes in the plantar pressure when walking as objective index. Total of 21 plantar fasciitis patients were chosen as subjects of the study. Low-Dye taping and sham taping was alternatively applied to the subjects for duration of a week for each at a time. Analysis of plantar pressure and gait parameters using AOFAS (American Orthopedic Foot and Ankle Society) Scale that evaluates the pain and functional aspects of the foot and SmartStep™ pneumatic insole was carried out 3 times, once prior to commencement of treatment, once following low-Dye taping and once following sham taping. The results were then analyzed. Although there were improvements in AOFAS Scales in both low-Dye taping and sham taping, the extent of the improvement was greater

for low-Dye taping. Key gait parameters including cadence, walking speed, stance phase ratio, etc did not display significant difference with the normal group even before the treatment, and no significant difference was observed even after both tapings. In the case of plantar pressure, the pressure on the hind foot in the stance phase prior to treatment was lower than the normal group. The pressure on the hind foot displayed statistically significant increase after application of sham taping and low-Dye taping. Although the extent of increase in the pressure in the case of sham taping was only slight, low-Dye taping illustrated more definitive increase in pressure.

Biography

Hea-Eun Yang has completed her MA degree in CHA medical school and majored in physical medicine and rehabilitation. She had worked as an Assistant Professor at Severance Hospital and is currently working as a Section Chief at Veterans Health Service Medical Center.