

암재활

게시일시 및 장소 : 10 월 18 일(금) 08:30-12:20 Room G(3F)

질의응답 일시 및 장소 : 10 월 18 일(금) 10:00-10:45 Room G(3F)

P 1-90

Characteristics of treatment-related lower limb lymphedema in patients with melanoma

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INTRODUCTION

The aim of this retrospective study was to investigate the characteristics of treatment-related lower limb lymphedema in melanoma patients by observation of serial volume difference measured with infrared optoelectronic volumetry.

METHODS

Medical records of melanoma patients who had diagnosed of unilateral leg lymphedema after surgery with wide local excision and unilateral inguinal lymph node biopsy or dissection were retrospectively reviewed. Limb lymphedema was diagnosed by characteristic physical findings and clinical history. The volume of bilateral lower limb was measured with infrared optoelectronic volumetry and inter-limb difference in volume was calculated by subtracting the volume of unaffected limb from the volume of affected limb.

RESULTS

Total of 20 patients presented with clinical treatment-related lower limb lymphedema after surgery for melanoma. 14 patients (70%) had initial regional lymphedema at proximal thigh. Among them, 9 patients showed over 5% increased inter-limb difference regionally in proximal lower limb without distal edema (Ps-group) and 5 patients had regional proximal lymphedema below 5% difference (Pm-group). Rest of the patients showed initial whole lower limb lymphedema (W-group), with over 5% increased inter-limb difference in whole lower limb. The mean lymphedema onset time after surgery was 1.61 month. The mean number of dissected lymph node was 12.44 (PS), 11.2 (Pm), and 18.33 (W). All patients were educated to perform self manual lymphatic drainage, stretching exercise, and received proper compression stockings. All patients of W-group received CDPT, compared to 44.4% of Ps-group and 20% of Pm-group. 50% of W-group performed bandaging, while 22.2% and 20% of Ps- and Pm-group, respectively, applied compression bandage. After 1month, the mean total volume decline was greatest in Ps-group (67%) followed by W-group (57.37%), while total volume was increased in Pm-group (232.88%).

In serial difference of total volume between limbs, Ps-group showed gradual decline during the initial 6 month, while Pm-group presented increased value after 1 month follow-up, which was later decreased at 6 month follow-up. W-group showed reversed pattern compared to Pm-group. In Ps- and Pm-group, the patterns of serial difference of proximal volume between limbs were similar to the pattern of serial difference of total volume between limbs, indicating greater decline of proximal volume difference than distal area. The W-group presented sequential decrease in inter-limb volume difference of distal limbs, while volume difference of proximal limbs decreased at 1 month follow up and increased at 6 month follow up.

CONCLUSION

In patients with melanoma, treatment-related lower limb lymphedema may appear 1-2 month after surgery. Most patients with lymphedema are likely to have proximal dominant edema, and severe proximal lower limb lymphedema may show stiff decline of volume difference 1month of lymphedema treatment.

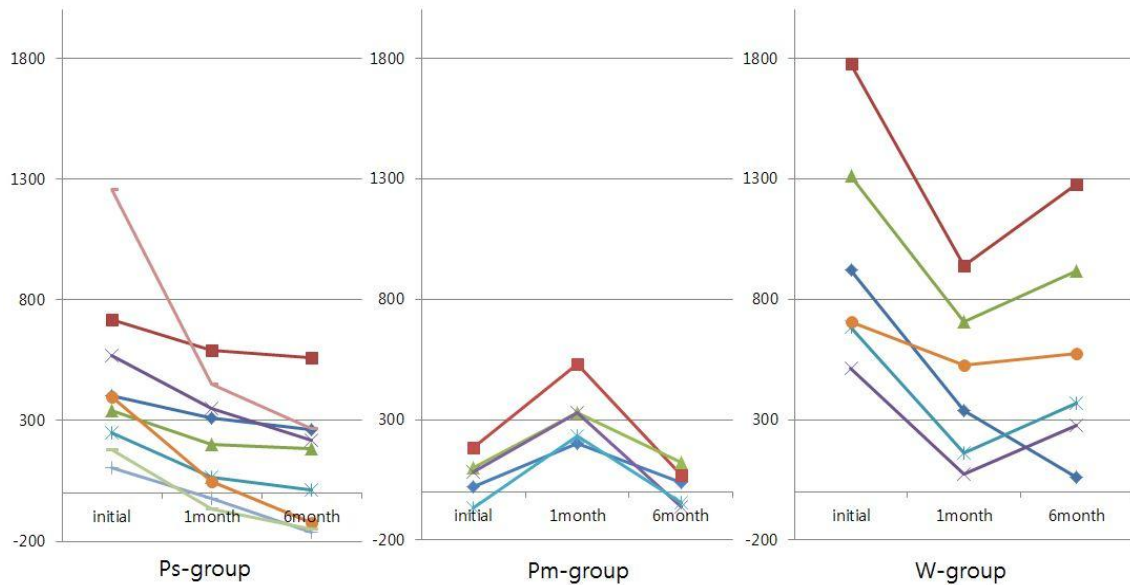


Fig. 1 Inter-limb difference of total lower limb

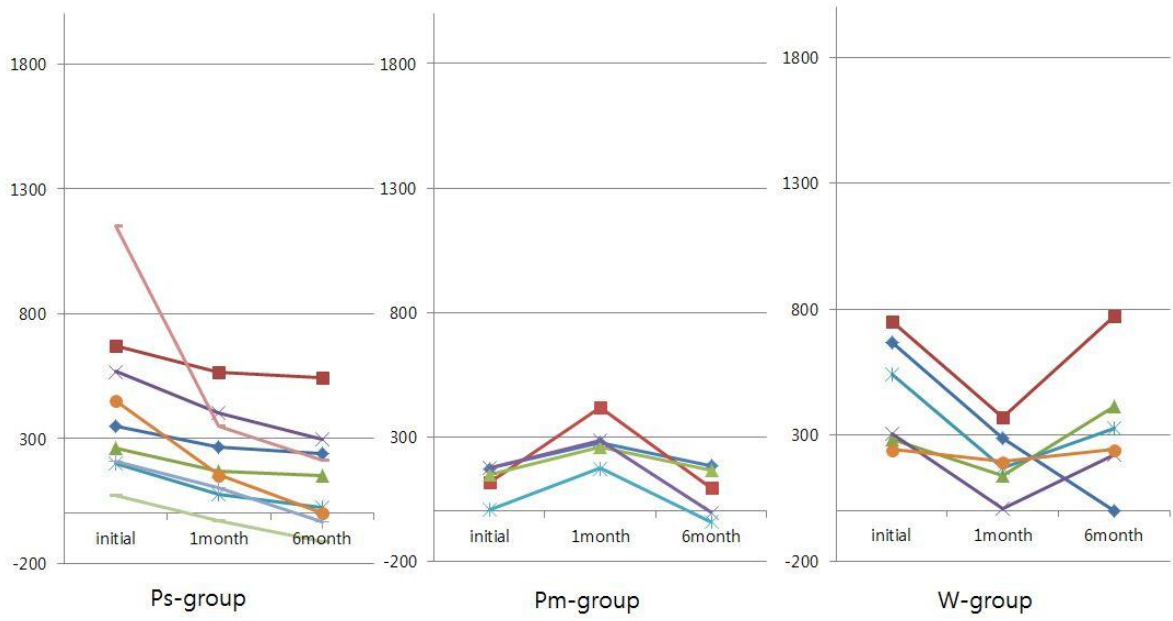


Fig. 2 Inter-limb difference of proximal lower limb

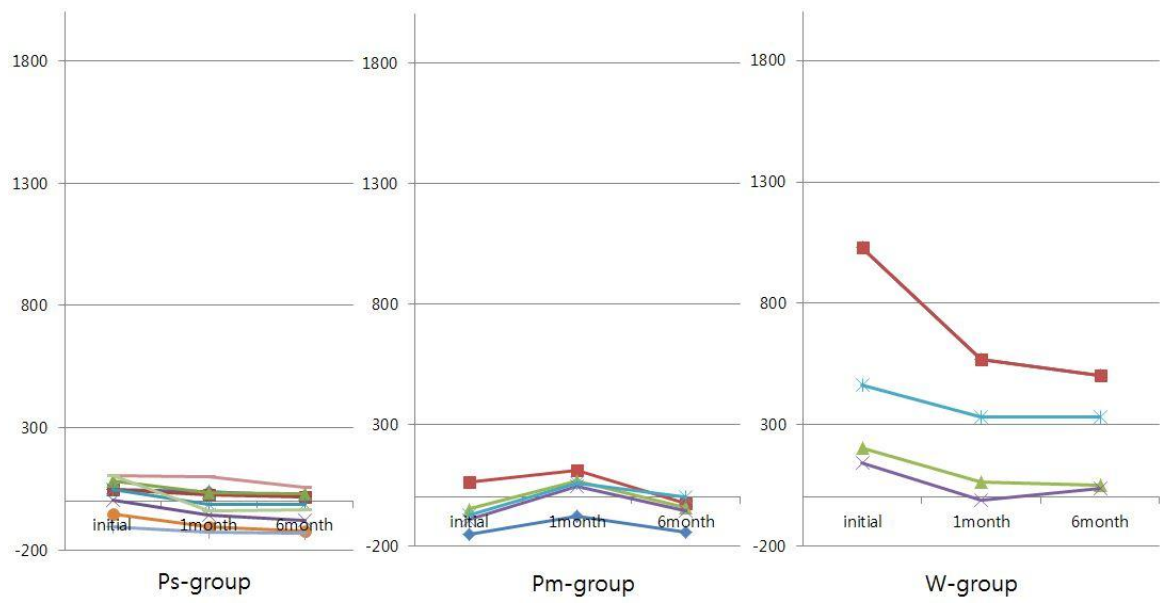


Fig. 3 Inter-limb difference of distal lower limb