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 1-86

Factors related to hand grip strength of breast cancer survivors

Seongwook Son[1,1*], Chung Reen Kim[1,1†]

Ulsan University Hospital, Department of Rehabilitation Medicine[1]

Hand grip strength (HGS) has been widely used, because it could be easily evaluated as an indicator of overall physical strength. There were reports of HGS and prognosis in various cancer survivors, and the relationship between HGS and fatigue in breast cancer survivors has also been reported. In general population, HGS was known to decrease with age and have is inversely related to height, weight, body mass index, and muscle mass. In this study, we tried to analyze factors related to HGS in breast cancer survivors.

Ten subjects with stage I-III breast cancer who underwent breast surgery and adjuvant chemotherapy were included in this study. As a baseline evaluation, data related to patient physical status, social status, breast cancer and treatment were collected. Also HGS was measured before chemotherapy. Then, at 3 and 6 months after baseline workup, reassessment of HGS and physical status was performed. Nonparametric and linear regression analysis were used for statistical analysis.

The results of the study showed that HGS of the surgical side at baseline was lower at older age (r=-0.709), but higher at higher body weight (r=0.647) and muscle mass (r=0.732). The HGS of the non-surgical side at baseline was not significantly correlated with any factor. However, at 6 months after baseline, HGS of surgical side was significantly associated with baseline HGS of surgical side (r=0.749), HGS of both hands at 3 months (r=0.906, surgical side and r=0894, non-surgical side) and HGS of non-surgical side at 6 months (r=0.870). In the case of the unoperated side, HGS was related to the HGS of surgical side at 6 months (r=0.870) and non-surgical side at 3 months (r=0.808).

In conclusion, in the early postoperative period, HGS was associated with factors already known to be related to HGS, but it was found that the association with these factors was weakened during chemotherapy. Rather, high HGS itself was associated with sustained strong HGS. Therefore, it is necessary to maintain the high muscle strength by continuing the strengthening exercise during the chemotherapy in breast cancer survivors.