

노인재활

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)

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Normative data on grip strength in a population-based study with adjusting confounding factors

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Purpose

We investigated population-based data on grip strength, analyzed for demographic factors, and proposed a formula to estimate grip strength that could be generalized to a population with different anthropometric and background characteristics.

Materials and Methods

This study used a complex, stratified, multi-stage probability cluster survey with a representative sample of the population. Select household participants (n = 6,577) over age 10 who were able to perform daily tasks without issue were included. Grip strength was measured in both hands, alternately, three times using a digital grip strength dynamometer.

Results

There was a curvilinear relationship between grip strength and age, and grip strength was higher in males than females. Hand preference significantly affected grip strength. Weight and height were positively correlated with strength in both hands, but waist circumference was negatively correlated with strength in both hands. The intensity of occupational labor did significantly affect grip strength in both hands. The formulas for estimating grip strength of each hand are presented as main results.

Conclusion

To determine normative data on grip strength, we may consider factors such as occupations with different physical demands, underlying medical conditions, anthropometric characteristics, and unmodifiable factors such as age and sex.