報文

肩関節最大運動角の年齢による相違が3種類の かぶり式半袖上衣の更衣動作パターンに及ぼす影響

九州大学大学院芸術工学府 谷 水 香奈美 九州大学大学院芸術工学研究院 村 木 里 志

The Influences of Maximal Angles of Shoulder Joints on Methods of Putting on and Taking off Three Kinds of Short-Sleeved Shirts by the Young and Elderly

Kanami TANIMIZU Satoshi MURAKI
Graduate School of Design, Kyushu University
Faculty of Design, Kyushu University
4-9-1 Shiobaru, Minami-ku,
Fukuoka, 815-8540 Japan

Abstract

The elderly have functional deterioration and pain in many parts of the body with aging, and have difficulty in putting on and taking off clothes. We analyzed the motion of 31 healthy elderly women (aged 70 to 85 years) and 29 young women (aged 20 to 34 years) putting on and taking off three kinds of short-sleeved shirts (a T-shirt, a polo shirt and a tank top), and investigated the influence of aging, the kind of clothes and maximal angles of the shoulder joints on the motion of putting on and taking off their shirts. The methods of putting on and taking off shirts were classified in three and four patterns, respectively. The pattern distribution differed between generations and different kinds of clothes in taking off but not putting on the shirts. In addition, one of the maximal angles of the shoulder joints (abduction) would be determinants in selecting the methods of taking off shirts in elderly women.

(Received October 5, 2011) (Accepted for Publication January 13, 2012)

Key words: elderly 高齢者, putting on and taking off 着脱, motion analysis 動作分析, clothing design 衣服設計, maximal angles of shoulder joint 肩関節最大運動角