

Shoulder Osteoarthritis Prevalence in Elderly Koreans - Part of KLoSHA Study -

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Introduction

Primary glenohumeral arthrosis is relatively rare in even older age groups. The authors undertook to document the prevalence of shoulder osteoarthritis(OA) at different disease stages in elderly Korean population.

Materials and Methods

This study was a part of Korean Longitudinal Study on Health and Aging (KLoSHA). KLoSHA was a population based prospective cohort study of health, aging, and common geriatric diseases in elderly Koreans, and was conducted from September 2005 to August 2006 on residents in Seongnam aged 65 years or older. This city had a population of 931,019 in 2005, and of these, 61,730 (6.6%) were aged 65 years or older. Of the 1,118 invited subjects, 640 participated in this study. The mean age of respondents was 71.7 ± 6.6 years (range 65–99 years), and 398 (57.2%) were women. The mean BMI of respondents was 24.3 kg/m². Both shoulder AP view were taken and evaluated the grade of osteoarthritis by two orthopaedic surgeon using Kellegren/Lawrence grading scale(K/L grade), Samilson and Prieto method(SP method), and Guyette method. Intra- and inter-rater reliabilities for the assessment of radiographic grading scales were tested using intraclass correlation coefficient (ICC).

Results

68 participants (10.6%) were detected with radiographic osteoarthritis. Mean age of checked cases was 76.0 years (range, 65–91 years), 48 cases (71.1%) were women. KL method: right side; grade 0/I/II/III/IV, 13/36/12/5/2 cases (19/53/18/7/3 %), left side 14/41/9/3/1 cases (21/60/13/4/2 %). SP method: right side; grade 0/I/II/III, 18/29/17/4 cases (27/43/25/5 %), left side; 16/40/8/4 cases (24/59/12/5 %). Guyette method: right side; grade 0/I/II/III, 18/30/18/2 cases (27/43/27/3 %), left side; 15/41/8/4 cases (22/60/12/6 %). Intra-rater reliability based on the two-way random ANOVA: K-L method(Right side:0.78, Left side:0.63), SP method(0.93/0.83), Guyette method(0.90/0.78). Inter-rater reliability; K-L method(0.59/0.56), SP method(0.39/0.67), Guyette method(0.53/0.62).

Conclusions

This is large cohort series that evaluated the prevalence of shoulder OA over 65 year old in certain area of Korea.

Key Words: Glenohumeral joint, Osteoarthritis, Prevalence.