

ABSTRACT

Correlation between non-traumatic knee pain with the gradation of osteoarthritis in elderly patient

Background: The number of cases of osteoarthritis of elderly patient in the world is still high, while the knee is the joint which is most affected by osteoarthritis among others, with the percentage of 35%, both men and women. There is a loose relationship between knee pain and radiological OA because sometimes, elder people with radiological OA are pain free and many people with knee pain have little radiological evidence of OA.

Objective: To analyze the correlation between the gradation of OA with the severity of knee pain in elderly patient.

Method: An observational study with cross-sectional design is done to 20 samples collected. Spearman rho correlation and T-test analysis method is used for analytic statistic. The samples are obtained by fulfilling the inclusion and exclusion criteria such as elderly patients > 50 years old, diagnosed with osteoarthritis, traumatic knee pain, usage of oral NSAID drugs for less than 24 hours, BMI > 30, and usage of intra-articular drugs. The severity of the knee pain is determined by knee pain questionnaire interview results and the gradation of OA is determined by x-ray examination.

Result: There is no correlation between knee pain score and OA grading ($p=0.959$), there is no correlation between sex and knee pain score ($p=0.358$), there is no correlation between sex and OA grading ($p=0.287$), there is no correlation between age and OA grading ($p=0.179$), there is no correlation between BMI and OA grading ($p=0.823$).

Conclusion: There is no correlation between knee pain score and OA grading in elderly patients. Besides that, there is also no correlation between sex, knee pain, and OA grading and between OA grading with age and BMI.

Keywords: Osteoarthritis, elderly, non-traumatic knee pain.