

Radiographic Osteoarthritis in the Elderly Population of Zagreb: Distribution, Correlates, and the Pattern of Joint Involvement

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Aim. To determine the prevalence of radiographic osteoarthritis on five joint groups in an urban population sample of 306 women and 304 men over the age of 45 and to assess the influence of some risk factors on osteoarthritis. The validity of concept of generalized osteoarthritis was also examined by analyzing the association of osteoarthritis on different joint sites.

Methods. Radiographs of both hands, both knees, and the right hip were taken. Osteoarthritic changes on distal interphalangeal, proximal interphalangeal, first carpometacarpal joints, knees, and hip were graded according to the Kellgren-Lawrence scale. The association among osteoarthritis on different joint sites was analyzed using logistic regression. Subjects were tested for age, duration of postmenopause, anthropometric measures, blood pressure, and smoking as risk factors for osteoarthritis.

Results. Hip was the most frequent site of osteoarthritis in men (27.3%), whereas distal interphalangeal joints predominated in women (43.5%). Polyarticular osteoarthritis (³3 joints) was present in 10.8% women and 5.9% men. There was a significant influence of age on single joint osteoarthritis, but not on multiple joint involvement. Obesity was significantly correlated with knee osteoarthritis in women and with osteoarthritis on distal interphalangeal joints in men.

Conclusions. In our population sample, the prevalence of knee osteoarthritis was lower and the prevalence of hip osteoarthritis higher than reported for most of other populations. The tendency towards polyarticular osteoarthritis that is more common than would be expected by age, suggests a subset of generalized osteoarthritis.

Key words: aged; arthritis, degenerative; Croatia, elderly; obesity; osteoarthritis, radiography; x-ray, diagnostic