
relationship of knee osteoarthritis to prevalence and pattern of osteoarthritis of the hand

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Osteoarthritis is a complex response of joint tissues to aging, genetic and environmental factors, characterized by degeneration of cartilage, bone remodeling and over growth. (Howell, 1992). Fifty patients were diagnosed as having knee OA clinically and radiologically. These patients were classified into two groups: Group (I) included patients suffering from knee OA without hand OA. They were 33 patients (66%), 20 females (60.6%) and 12 males (39.4%) with a female to male ratio 3:5. Their ages ranged between 40-70 years (mean \pm SD 54.2 \pm 9.8 years). Their mean body mass index was 31.7 kg/m² and their mean duration of disease was 3.64 years. As regarded to the radiographic grading for OA of these group 27.3% had grade II of their right knee and 6.1% had grade 0 of their left knees, 6.1% had grade I of their left knees, 36.4% had grade II of their left knees, 51.5% had grade III of their right knees and 36.4% had grade III of their left knee, 21.2% of the group had grade IV of their right knees while 15.2% had grade IV of their left knees. The right knee is more affected than left knee. Group (II) included patients suffering from knee OA and hand OA. They were 17 patients (34%), 14 females (82.4%) and 3 males (17.6%) and with a female to male ratio of 4.5:1. Their ages ranged between 40-75 years (mean \pm SD 58.3 \pm 9.7 years). Seven patients (41.2%) of this group had clinical and radiological hand OA. In 17 patients suffering from hand OA the mean body weight was 95.12 kg. The mean height was 163.35 cm, the mean body mass index was 35.84 kg/m² and they had a mean duration of the disease of 5.53 years. As regard to their radiographic grading for hand OA, 28.6% of the patients had grade 0/1 of their right hand, 28.6% of the patients had grade 0/1 of their left hand, 14.3% of the patients had grade II of their right hand 14.3% of the patients had grade II of their left hand, 57.1% of the patients had grade III of their right hand while 57.1% of the patients had grade III of their left hand. The right hand was most affected than the left hand. As regards to the patients suffering from hand OA. The severity of the radiographic grading of hand OA had more advanced grades of knee OA than patients free from hand OA. The results were as follows out of the 17 patients suffering from hand OA, 42.9% of the patient had grade III and 57.1% had grade IV of the right knee and 85.7% of the patients had grade III, 14.3% had grade IV of the left knee. The result of the present work showed a significant correlation between: Aging, duration of the disease and OA of the knee and hand, where patients suffering from knee and hand OA were older and had longer duration of the disease than patients suffering from knee OA only. Sex difference and prevalence of

knee OA where OA of knee and hand was more prevalent in female patients than in male patients. Body mass index and prevalence of knee and hand OA, where patients with higher body mass index had more severe degree of OA and had more joint affection than patients with lower body mass index. From this study we concluded the significant association between clinical and radiographic OA at different hand sites and knee OA. The strength of this association increased with increased disease duration, patient age and BMI. Radiography and clinical examination are preferable for the confirmation of hand OA. -, NermiHIP!, -1...inm1olipt, iwirprwirr nrrromirommuor " ""141U=1111111.111,4140 i II iNpposigmeggliomg III peel) I IN 1