Demographic Characteristics in Woman Patients with Knee Osteoarthritis and Relationship with Obesity

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Abstract: Objective: Excess bodyweight, expressed as increased body mass index, is associated with osteoarthritis risk. In this study, we investigated symptomatic knee OA patients to determine the relationship between OA and obesity.
Method: One hundred nine woman patients with primary knee OA diagnosis according to ACR (American College of Rheumatology) criteria were enrolled. Patient body mass index (BMI) was calculated as kg/m², and 30 kg/m² or higher was considered as obese. The BMI between 25-29.9 is overweight people, and over 30 is considered obese. If the BMI is less than 20 poor person is normal weight is between 20-24.9
Patients; pain was assessed by the two parameters of horizontal visual analog scale (VAS) and the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC).
Radiological assessment was done according to Kellgren-Lawrence criteria using front, back and side weight-bearing knee X-rays.
Results: BMI was positively related to risk of knee osteoarthritis in women and men, comparing obese and normal weight persons. The average values were: Age: 61.3±11.8 year VAS: 6.7±1.5 BMI: 30.8±5.2 kg/m² (68.2% obese and overweight- 31.8% normal) WOMAC total: 49.3±8.9 Kellgren-Lawrence : 2.4±0.7. The relationship between BMI and radiological staging was statistically significant
Conclusions: BMI was positively related to risk of knee osteoarthritis in women comparing obese and normal weight persons.

Key words: knee, osteoarthritis, woman