

## **Radiographic Osteoarthritis and Serum Triglycerides**

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**Objectives:** In view of the many studies linking obesity and osteoarthritis, we sought in this study to find the relationship between osteoarthritis and one of the metabolic correlates of obesity which is serum triglycerides.

**Methods:** This is a cross-sectional radiographic study to assess the relationship between serum triglyceride level, knee and generalized osteoarthritis (OA). Two hundred and eighty six patients were selected from fourteen primary clinics in Riyadh, Saudi Arabia. Their x-ray findings and serum triglycerides level were analyzed for the association between OA and hypertriglyceridemia.

**Results:** We found a weak relationship between knee OA and the third triglyceride percentile [odds ratio (OR) 1.503 (95% CI, 0.718-3.145)], and generalized OA and third triglyceride percentile [OR 1.907 (95% CI, 0.662-5.494)] after adjusting for age, sex, BMI, uric acid and cholesterol. The relationship in females was stronger particularly for generalized OA [OR 2.483 (95% CI, 0.496-12.422)]. However, none of the relationship reached statistical significance.

**Conclusion:**The relationship between hypertriglyceridemia, knee and generalized OA is weak and statistically not significant.