Assessment Of Cardiovascular Risk Factors In Patients With Osteoarthritis Knee

Sagar Goel

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Author: Dr Sagar Goel, Postgraduate in Dept of Orthopedics, KMC Mangalore
Dr Surendra U Kamath, HOD Orthopedics, KMC Mangalore

Background: Osteoarthritis and CVD are prevalent in India. However, there is dearth of literature among indians. This study was carried out to assess various CV risk factors in OA knee patients with an objective to find out association, screening and management.

Methods: 225 patients included in this study were diagnosed to have OA knee on the basis of K-L grade on radiograph. Also they were assesed for CV risk factors(age, BMI, SBP, DM, TC, HDL, smoking) with the help of Joint British Society Risk3 Calculator which gave 3 variables: JBS3 risk score, heart age, life expectancy.

Results: Severe OA knee patients had a statistically significant higher prevalence of CV risk factors. Some patients were diagnosed to have hypertension, hypercholesterolemia for the first time and few were intimated with the severity of their known comorbidities. Grade 4 OA knee patients were found to have 38% JBS3 risk, 82 heart age and 77 life expectancy as compared to grade2 patients who had 11% JBS3 risk, 63 heart age and 82 life expectancy.

Conclusion: Significantly higher prevalence of CV risk factors and JBS3 risk of developing CVD was found with increasing severity of OA. When applied to a larger population such tool can help us in assessing the CV risk factors in OA knee patients with an aim to screen and manage patients with OA knee using a wholesome approach with respect to their cardiovascular status. Also such tool can help an Orthopaedician to predict the life expectancy while planning TKR.
Keywords: osteoarthritis, cardiovascular disease, K-L grades,