Viscosupplementation and its effectiveness using the KOOS score in treating knee osteoarthritis

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Background: Osteoarthritis is the most common joint disorder in the world that will affect nearly half of all adults by age 85. The appropriate management in patients with mild to severe osteoarthritis still remains a challenging area where viscosupplemtation (SYNVISC) can play an important role.

Objective: To analyze the efficacy of intra-articular injections of SYNVISC (Hylan G-F 20) for the treatment of Grade II-IV painful knee osteoarthritis using validated outcome scores (KOOS).

Design: This is a retrospective case series study including patients over a span of 6 years.

Participants: A convenience sample of 140 patients with Grade II-IV knee osteoarthritis participated in this study. Patients had an age range from 41-83 years of age with a mean age 60 years old. Patients were included if they completed a baseline KOOS survey and a 6-week follow-up KOOS survey after intra-articular injection of Hylan G-F 20.

Main outcome: After Hylan G-F 20 injection, a significant increase (P<.05) in the KOOS survey categories of pain (17.4% increase), symptoms (14.7%), activities of daily life(15.1%), sports and recreation(11.6%) and knee related quality of life(20.2%) were seen.

Conclusion: Previous literature on viscosupplementation has shown a failure of efficacy based on a lack of statistically significant clinical improvement. The data from this study was statistically significant, and indicates that patients are satisfied and find it easier to perform daily activities with less knee pain after a viscosupplementation injection. Hylan G-F 20 injections provide good clinical benefits for the patient and are a safe treatment for knee osteoarthritis.

Biography

Wendell Cole has completed his B.S. at the age of 20 years from Georgia State University and is a current MD2 student at Morehouse School of Medicine. He is a 2015 scholar of the American Academy of Orthopaedic Surgeons Nth dimensions educational solutions program. He has presented this poster at the National Medical Association 113th Annual Convention and Scientific Assembly in Detroit, MI.

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