Treatment of Kienbock disease by lunate core decompression

Mohammad Reza Aghamirsalim
Tehran University of Medical Sciences (TUMS), Iran

Abstract

Purpose: Kienböck disease is characterized by avascular necrosis of the lunate bone, which is usually progressive without treatment. This study examined lunate core decompression for its treatment potential.

Methods: We surgically treated 20 patients with stage 1 to 3b Kienböck disease with lunate core decompression. We evaluated pain, range of motion, functional disability, and radiographic indices in these patients at baseline and 5 years after surgery.

Results: The mean age of the patients was 29 years; 16 were men. Ten patients had Lichtman stage 1 disease, 6 had stage 2 disease, 3 had stage 3a, and 1 had stage 3b disease. Range of motion scores showed meaningful improvement. Two patients did not improve with this technique and were revised with radial shortening procedures.

Conclusions: Lunate core decompression is a simple surgical procedure that is effective in the treatment of Kienböck disease.

Type of study/level of evidence Therapeutic IV.

Biography

Mohammadreza Aghamirsalim has completed his M.D. at the age of 25 years from Tehran University of Medical Sciences and became an orthopaedic and trauma surgery resident at Tehran University of Medical Sciences. He is the Vice Researcher of department of orthopaedic surgery – Shariati hospital, Tehran University of Medical Sciences. He was chosen as the best Medical Student of Iran in 2012. In addition, he was nominated as an Outstanding scholar student of Iran in 2013. He has published more than 15 papers in reputed journals. One of his original articles entitled Treatment of Kienböck Disease by Lunate Core Decompression published in the Journal of Hand Surgery (American) and was referenced in Campbell’s Operative Orthopaedics, 12th Edition.