Osteochondral allograft transplantation effective for certain knee cartilage repairs

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Isolated femoral condyle lesions account for 75% of the cartilage repair procedures performed in the knee joint, and physicians have a variety of techniques to consider as part of surgical treatment. Osteochondral allograft transplantation (OCA) is a valuable and successful approach for this condition, as described by research presented today at the American Orthopaedic Society for Sports Medicine's Specialty Day in New Orleans.

"Our study demonstrated that the modern OCA transplantation technique, which utilizes thin, dowel type grafts, was very effective in treating patients with femoral condyle cartilage lesions," noted Luís E. Tírico, MD, who is currently with the University of Sao Paulo in Sao Paulo, Brazil and served as the research fellow and lead author on the presentation under Dr. William Bugbee, Director of Clinical Research and Head of the Scripps Cartilage Restoration and Transplant Program at Scripps Clinic in La Jolla, CA. "In 200 cases, we noted an 89% satisfaction rate with those treated by this method, along with significant improvements in clinical scores and a low graft failure rate."

The study, which represents the largest reported cohort of isolated femoral condyle lesions treated with the modern, dowel technique for OCA transplantation included 187 patients (200 knees) who underwent OCA transplantation between June 1999 and August 2014. At a minimum follow-up of two and average of 6.7 years, International Knee Documentation Committee (IKDC) total scores improved from 43.7 to 76.2 on average, and Knee injury and Osteoarthritis Outcome Score
(KOOS) for pain improved from 66.5 to 85.3, and 74.5 to 91.1 for activities of daily living. Further surgery was required in 52 knees (26%), of which 16 (8%) were considered failures, as defined by removal or revision of the allograft.

"The modern technique of OCA transplantation for treating isolated femoral condyle lesions offers patient better results over other cartilage repair procedures," commented Tírico. "These results appear to be equal or superior to any other cartilage repair procedure for the treatment of femoral condyle lesions and leads us to consider whether fresh OCA should be viewed as the current gold standard in cartilage repair for focal femoral condyle lesions.

More information: www.sportsmed.org/aossmimis/Me ... SD2018/Abstract1.pdf