Abstract Number: 10931

JOURNAL OF THE JFA Foot & Ankle

Osteochondral lesion with subchondral cyst in the proximal phalanx of the hallux secondary to gouty tophi treated with collagen membrane (AMIC): description of technique and case report

Arthur Hoelz Tellini Toledo[1], Danilo Ryuko Candido Nishikawa[2], Fabio Correa Paiva Fonseca[1], Guilherme Honda Saito[3], Alberto Abussamra Moreira Mendes[3], Marcelo Pires Prado[4]

1. Hospital das Clínicas da Faculdade de Medicina da USP, São Paulo, SP, Brazil
2. Hospital do Servidor Público Municipal de São Paulo, São Paulo, SP, Brazil
3. Hospital Sírio-Libanês, São Paulo, SP, Brazil
4. Einstein Hospital Israelita, São Paulo, SP, Brazil

Correspondence: Danilo Ryuko Candido Nishikawa **Email:** dryuko@gmail.com

Gout is the most common cause of inflammatory arthritis in men, typically presenting with severe, acute pain in the first metatarsophalangeal joint. Osteochondral lesions secondary to gout are rare, and when they do occur, there is no consensus on the best treatment. The matrix-induced autologous chondrogenesis (AMIC) technique, when applied with a collagen membrane, has been shown to be an effective alternative for treating these lesions. The objective of this study was to describe the surgical treatment of an osteochondral lesion associated with a subchondral cyst, resulting from a gouty tophus in the proximal phalanx of the hallux, using the collagen membrane. Male patient, 23 years old, presenting osteochondral lesion in the proximal phalanx of the hallux, with involvement of the articular surface, secondary to a gouty tophus. Surgical treatment consisted of curettage of the subchondral cyst through a dorsal bone window, filling the defect with autologous bone graft, and repairing the lesion with collagen membrane. After a 2-year follow-up, the patient presented with complete pain resolution, with improvement on the visual analog scale (VAS) from 6 to 0 and an increase in the AOFAS score from 69 to 100. The patient fully resumed physical and daily activities without limitations. Considering a two-year follow-up period, the proposed treatment demonstrated satisfactory functional results, as evidenced by improvements in VAS and AOFAS scores.

Keywords: Collagen; Cartilage, articular; Membranes, artificial. Osteochondritis.

DOI: https://doi.org/10.30795/jfootankle.2026.v20.2050

This abstract was presented at the XXII Brazilian F&A Meeting 2026, held in São Paulo, Brazil, from April 18 to 21, 2026.