

VISCOSUPPLEMENTATION IN PATIENTS WITH KNEE OA AND CHRONIC ANTICOAGULANT THERAPIES- SECURITY PROFILE

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Abstract

Introduction

Aged population presents a high prevalence rate of osteoarthritis (OA) and cardiovascular pathology, anticoagulant therapy being frequently used in this group. Intra-articular Hyaluronic acid (HA) injections have been successfully used to improve joint lubrication and to modulate joint inflammation and their administration requires the use of thick needles of 21-22g. The aim of the study was to evaluate the security profile of intra-articular ultrasound guided injections (USGI) using thick needles in patients on current efficient anticoagulant therapy.

Material and method

Patients diagnosed with knee OA (Kellgren 2-3) and cardiovascular pathology requesting chronic anticoagulation with Vitamin K antagonists were recruited in the outpatient clinic to receive one viscosupplementation intra-articular USGI. All patients presented chronic refractory knee pain after previous systemic/ local NSAIDs and other painkillers, according to current protocols. Only patients with mild knee effusion/ synovial hypertrophy, no popliteal cyst at US examination, and efficient INR between 2 and 3, determined in the same day, were included. No switch from anticoagulant Vitamin K antagonists to Heparin was made. The US evaluation was repeated post procedural immediately, after 45 minutes and 72 hours. Informed written consent was signed by all patients.

Results

Thirty-two patients (78.12% women, age 65±8.3 years) with knee OA received unilateral one USGI with monodose HA. In all patients, the viscosupplementation agent was deposited strictly inside the joint space under continuous visual US control. No iatrogenic bleeding inside the joint was noticed after the interventional maneuver in 100% of the knees. No local injection-site nor systemic reactions did occur when patients were checked at 72 hours and no further reports of injection linked (technical or product) side effects were identified.

Conclusion.

Intra-articular injections with thicker needles (21-22g) have a very good safety profile in patients with current efficient anticoagulant Vitamin K antagonists. There is no need to stop anticoagulant therapy or to switch on Heparin previous to the USGI when INR is lower than 3.

References

1. Sakellariou G, Conaghan PG, Zhang W, *et al.* EULAR recommendations for the use of imaging in the clinical management of peripheral joint osteoarthritis. *Ann Rheum Dis* 2017; 76(9):1484-1494.
2. Martin EJ, Cooke EJ, Ceponis A. Efficacy and safety of point-of-care ultrasound-guided intra-articular corticosteroid joint injections in patients with haemophilic arthropathy. *Haemophilia* 2017;23(1):135-143.