E-Poster

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Efficacy and Safety of Lateral Femoral Circumflex Artery Embolization for Greater Trochanteric Pain Syndrome: Protocol for a Prospective Observational Cohort Study

Topic: Injections (Joint, Spine, etc.)

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BACKGROUND

Greater trochanteric pain syndrome (GTPS) presents with pain and tenderness over the greater trochanter that interfere with ambulation, physical function and sleep. As no single treatment has shown absolute efficacy, a combination of pharmacological and non-pharmacological interventions is typically used, while surgical approaches are reserved to selected non-responsive cases. Recently, minimally invasive image-guided procedures, such as lateral femoral circumflex artery (LFCA) embolization, have emerged as potential adjuncts or alternatives to traditional non-surgical treatments, showing potential in alleviating pain and dysfunction associated with GTPS.

The aim of the study is to evaluate the safety and the efficacy of transarterial embolization of LCFA with Imipenem/Cilastatin (I/C) in patients suffering from GTPS.

METHODS

This protocol is for a prospective observational cohort study targeting 60 patients suffering from chronic pain due to GTPS, refractory to conservative treatments. The following evaluations will be performed before embolization treatment, and one and six months thereafter: i) clinimetric assessments of perceived disability and pain phenotype (VISA-G questionnaire, Brief Pain Inventory questionnaire, pain location and extension); ii) physical performance assessments (40-m fast paced walk test, 12-step stair climb test and 30-s chair stand test); iii) anthropometric and body composition evaluations with three-dimensional optical imaging system and bioimpedance system. The procedure will be performed in a single session in the angiography room of the Radiology Unit under local anesthesia with femoral access. The embolization of the target area will be performed using I/C diluted 1 g:10 mL with contrast media, injected every 0.3 mL until total occlusion of the blushes. Patients will be discharged, barring complications, on the same day.

The primary endpoint of the study is to support the safety of the procedure, in terms of peri- and post-procedure complications, evaluated in timing of onset and severity. From previous studies, no major adverse events were found, and in a few cases were observed small groin hematoma or mild posterior tight numbness, spontaneously resolved in 15-30 days. Moreover, we expect to demonstrate the clinical efficacy of the procedure, in terms of change of pain phenotype and improvement of physical performance.

CONCLUSION

The presented protocol aims to increase evidence of efficacy for this promising procedure, especially oriented to selected patients refractory to conservative treatments and no indication for surgery, with comprehensive evaluations of clinimetrics, functional and antropometric data that may be interesting to correlate with the clinical effects.

Statement of Disclosures

None

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