Background: Gouty is an inflammatory and metabolic disease. Hyperuricemia can contribute to inflammation, hypertension and cardiovascular disease, adipogenesis and lipogenesis, impaired insulin and glucose metabolism, and liver disease. In turn, allopurinol therapy, a key component of the management of hyperuricemia, is associated with the development of chronic kidney disease (CKD), particularly in patients with gouty arthritis.

Objectives: To study the frequency and structure of MS in patients with gouty arthritis in combination with NAFLD, to identify the major traditional and disease-associated risk factors.

Methods: The study included 70 patients with gouty arthritis. The diagnosis was made based on the criteria of S. Wallace et al. All patients were examined with general clinical and biochemical blood tests (determination of uric acid, transaminases, glucose, glycosylated hemoglobin, insulin, lipid spectrum), physical examination (measurement of blood pressure, body mass index in kg/m²), calculation of the HOMA index, An ultrasound examination of the liver was performed as the instrumental diagnostic method.

Results: Among the surveyed, men and women accounted for 60% and 40%, respectively, with an average age of 52 years, with an average disease duration of 8.2±3.5 years. The debut of gouty arthritis was observed at 35.6±3.5 years. 25 patients had a family history of gouty arthritis, 64 patients had arterial hypertension. The patients were divided into two groups: the first group included 50 patients with primary gouty arthritis and signs of NAFLD and the second group included 20 patients with gouty arthritis without signs of NAFLD. In group 1, 20 patients (40%) had arterial hypertension of the 1st degree, 30 (60%) patients of the 2nd degree. The uricemia level varied from 390.8 to 612.2 µmol/l. Dyslipidemia was diagnosed in 72% of patients (mainly type Ila and lib), the average level of fasting glyceremia was 7.8±3.0 mmol/l, and glycosylated hemoglobin was 7.0±1.5%. The reduction of hepatic steatosis was achieved by the 12th week in all patients (72.15 cm³) to week 12 (D, urate volume: 7.66 cm³). ***: p<0.001; #: Received rasburicase at week 0 only; #&###: Received rasburicase 7.5mg/d at week 0.

Conclusion: This pilot study shows rasburicase is well tolerated in patients with refractory chronic gouty arthritis and may be a reasonable option to effectively lower the urate burden of these patients, although this is an off-label use. Further prospective randomized controlled studies to verify the efficacy and safety are needed.

Funding: This study was funded by Yat-sen Clinical Research Project.

Disclosure of Interests: None declared


AB1058 IS HYPERURICEMIA ASSOCIATED WITH TYPE 2 DIABETES DEGENERATIVE COMPLICATIONS?

F. Fiha1, N. El Amri1, D. Khalfa1, A. Ben Abdelkrim2, B. Ben Abdallah3, S. Lataoui1, K. Baccouche1, E. Bouajina1, K. Ach2, Farhat Hached Hospital, Rheumatology Department, Sousse, Tunisia; Farhat Hached Hospital, Endocrinology and Diabetes Department, Sousse, Tunisia

Background: Prevalence of hyperuricemia (HU) is constantly increasing around the world and HU is now identified as an independent cardiovascular risk factor. The objective was to determine the prevalence of HU in patients with type 2 diabetes (T2D) and to identify degenerative complications of T2D associated with HU.

Methods: A cross-sectional descriptive study was conducted in the rheumatology and endocrinology departments of Farhat Hached University Hospital of Tunis over a period of 6 months. Patients diagnosed with T2D according to the 2021 guidelines of the American Diabetes Association were included. A cut-off of uric acid >360 µmol/l in females and >420 µmol/l in males was used to define HU.

Results: One hundred fifty-one patients were included. Sex ratio F/M was 1.4. The median age of 61 years. The prevalence of HU was 17.2%. Only 6% of patients had gout. Degenerative complications of T2D were encountered in 74.2% of cases. Diabetic neuropathy was the most common (51.7%) and was significantly associated with HU (p=0.049). Diabetic nephropathy was reported in 38.4% of patients and was also associated with HU (p=0.008). HU was associated with renal failure (p=0.01), microalbuminuria (<0.01), proteinuria (p=0.001) and history of ischemic stroke (p=0.048). Diabetic feet problems were reported in 16.9% of patients and were associated with HU (p=0.008). Nevertheless,
Background: Complex regional pain syndrome type-1 (CRPS-1) is a severely disabling pain syndrome characterized by sensory and vasomotor disturbance, swelling, and functional impairment. Persistence of signs and symptoms has been observed in up to 64% of cases until 5.8 yrs after the onset of manifestations. Long-term disability, such as irreversible functional limitation, has been reported in up to 28% of cases with severe consequences on workability. No scores are validated to evaluate residual disability. Bisphosphonates have the best efficacy profile, compared with other therapeutic approaches, but data on long-term effectiveness are lacking.

Objectives: To retrospectively evaluate long-term residual disability in patients with CRPS-1 of hand or foot after treatment with IV Neridronate (IVNer). To identify predictors of residual disability. To quantify disease outcomes, such as patient's subjective perception and residual pain. To assess long-term safety profile.

Methods: We retrospectively collected data of patients affected by CRPS-1, treated with IVNer, referred to a tertiary Rheumatology Centre between Feb 2013 and Dec 2020. Visual analogue scale (VAS) and McGill Questionnaire (McQG) were used for pain assessment. Disabilities of the Arm, Shoulder and Hand (DASH) and American Orthopaedic Foot and Ankle Society’s (AOFAS) ankle-hindfoot scale for hand and foot involvement, respectively, were administered to explore disability through a phone survey. This kind of investigation was preferred for Covid pandemic.

Results: 106 patients with definite diagnosis of CRPS-1 were included, mean age±standard deviation 55.6±13 yrs, 67% females, mean follow up duration 56.3 months (range 14-94), 46.2% with hand involvement. The mean VAS score before treatment onset was 55.8±23.4 mm, while the McQG was 12.9±8.7 in the sensory domain, 4.9±3.3 in the affective domain and 17.8±9.2 on the total score. Based on the patient’s subjective perception and the proposed semi-quantitative scale, 77.4% described themselves as fully recovered (FR), 15% partially recovered (PR), and 7.6% with persistent disease (PD). Comparison between baseline and follow-up VAS shows a significant reduction (55.8±23.4 vs 15.1±26.4, p<0.00001). Pain assessment by McQG showed a significant improvement in global score (baseline vs follow-up 17.5±9.2 vs 3.9±7.6, p<0.00001), sensory (12.9±6.7 vs 2.7±5.5, p<0.00001) and affective (4.9±3.3 vs 1.2±2.3, p<0.00001) domains. According to DASH score, 79.2% of the patients were FR, 3.8% had some difficulties, but with overall preserved use of the upper limb, and 17.0% had permanent functional disability. According to AOFAS ankle-hindfoot scale 76.4% of patients were FR, 16.0% had partial recovery, and 7.6% had severe functional impairment. Percentages of DASH and AOFAS scores showed a complete accordance with patients’ subjective perception (Figure 1a and b). The only predictor of long-term functional impairment for CRPS-1 in the hand was a delayed treatment compared to symptoms onset (p=0.02). No predictors were found for foot localization. No patients reported the occurrence of osteonecrosis of the jaw or articular fractures/avascular fracture features.

Figure 1.