Results: Sixty-six samples were studied: mean age was 48.9 (+/- 9.7) and 68% were female. Mean duration of shoulder pain was 30 months with a mean VAS pain of 68/100 (+/-14). Mean calcification size was 1.8 cm. Results of ELISA were as follows: mean level of PEDF at 1097 pg/μg, mean level of OPG at 135 pg/μg, mean level of POSTN at 6.9 pg/μg, mean level of ACT A at 19.6 pg/μg and mean level of OPN at 49.6 pg/μg although BMP-2 was undetectable. There was no correlation between level of proteins and the size of the calcification or the duration of pain. There was no difference in protein levels between type A and type B calcifications on radiography (classification of the French Society for Arthroscopy). In contrast, levels of POSTN and OPN were significantly higher in nodular calcifications compared to the homogenous ($p=0.003$ and $p=0.01$ respectively) or fragmented types ($p=0.03$ and $p=0.04$ respectively). Furthermore, calcifications without acoustic shadowing were enriched in POSTN compared to those with ($p=0.04$). Finally, the periostin level was significantly higher in calcifications that have responded well to UGPL ($p=0.02$).

Conclusion: In this cohort of patients treated by UGPL, we observed higher levels of POSTN and OPN in the less dense calcifications and POSTN enrichment appeared to be associated with a better response to UGPL. Considering these data, further studies will be necessary to better understand the role of this protein in calcific tendonitis.

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AB0925

MULTIPLE FRACTURES DUE TO IRON-INDUCED AND FGF23-MEDIATED HYPOPHOSPHATEMIC OSTEOMALACIA: AN UNKNOWN ADVERSE EFFECT

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Background: The use of a specific and widely used type of intravenous ferrotherapy, ferric carboxymaltose (FCM), has been linked to the development of an asymptomatic and transient hypophosphataemia. However, in recent years it has been published that it can generate a severe hypophosphataemic osteomalacia (HPO) mediated by fibroblast growth factor 23 (FGF23) that is associated with high morbidity¹. It is a potentially serious adverse effect whose prevalence is unknown and that clinicians may know little about.

Objectives: To know the clinical and biochemical characteristics of this adverse effect and make it visible in the medical community.

Methods: Observational descriptive study of three cases of patients assessed in the Rheumatology department of our hospital who were referred for study of recurrent fractures and diagnosed of FGF23-mediated HPO due to FCM. Demographic, clinical and laboratory data of the patients are described.

Results: The clinical and laboratory characteristics of the patients are shown in table 1. All patients presented clinical and biochemical features compatible with FGF23-mediated HPO (mean of FGF levels 240 kRU/L, NR 0-145). All had multiple insufficiency fractures (Fx) and/or avascular necrosis (AN), with hip involvement in all 3 cases. Other causes of HPO were ruled out in all of them using PET ¹⁸F-FDG, octreotide scintigraphy, abdominal magnetic resonance and PET ⁶⁸Ga-DOTATOC, and a genetic study of hypophosphataemic rickets was also performed in case 1. In all patients FCM was discontinued and phosphate levels were progressively normalized allowing the withdrawal of oral phosphate and calcitriol replacement therapy. After metabolic normalization, none presented new Fx or AN.

Conclusion: Treatment with FCM can cause severe FGF23-mediated HPO, multiple fractures and a great decrease in the quality of life. Since it can be potentially serious and easily reversible, it is important to favor the dissemination of these new cases and the knowledge of this disease. The need to monitor phosphate and/or FGF23 levels in patients receiving this intravenous iron therapy should be evaluated.

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Table 1. Clinical and biochemical characteristics of the patients

	Case 1	Case 2	Case 3
Age (years)^a	36	75	43
Medical history	Crohn's disease (CD), right hemicolectomy, CD-associated spondyloarthritis	Small bowel angiodysplasias	Antisintetase syndrome. Uterine fibroids.
Cause of anemia	Gastrointestinal bleeding and malabsorption	Gastrointestinal bleeding	Gynecological bleeding
Fe-CBX start date	10/2010	08/2013	02/2018
Fe-CBX discontinuation date	10/2018	11/2018	06/2018
Total time Fe-CBX (months)	96	63	4
Fractures	AN: left calcaneus posterior tuberosity, astragaline dome, right femoral head Fx: left talus, tibial pylon, tibia-astragaline and ischiopubial branch; right 2nd metatarsal, distal tibia, posterior tuberosity of calcaneus	Fx both femoral necks and right sacral wing	AN both femoral heads
Bone densitometry	LS: Z-score -2.4 FN: Z-score -2.4		LS: Z-score -0.5 FN: Z-score -1.3
Phosphate, mg/dL (NR 2.5-4.5)^a	1.8	1.6	1.3
Calcium, mg/dL (NR 8.6-10.2)^a	9.1	8.3	9.0
1,25(OH)₂D₃, ng/ml (NR 30-100)^a	54	12	7
PTH, pg/ml (NR 12-65)^a	71	223	104
AP, U/L (NR 46-116)^a	113	140	86
Ph-exc, mg/24h (NR 400-1300)^a	1609	1630	489
TPR, % (NR 73-87)^a	58.3	50.2	70.7
FGF-23, kRU/L (NR 0-145)^a	183	335	201
Time to normalization^b	10	4	8

^aDuring treatment with FCM. ^bOf serum phosphate levels since FCM discontinuation in months. LS: Lumbar spine. FN: Femoral neck. NR: Normality range. PTH: Parathyroid hormone. AP: Alkaline phosphatase. Ph-exc: 24-hour urine phosphate excretion. Ph-cl: phosphate clearance. TPR: Tubular phosphate reabsorption. Data highlighted in bold indicate altered values.

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AB0926

PERFORMANCE OF THE ACR-EULAR GOUT CLASSIFICATION CRITERIA FOR THE DIAGNOSIS OF GOUT IN CLINICAL PRACTICE: A ONE-YEAR FOLLOW-UP STUDY

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Background: Classification criteria are used for classifying groups of patients, especially for clinical trials, and diagnostic criteria for diagnosis in individual patients.

Objectives: to establish the performance of the 2015 ACR/EULAR gout classification criteria for the diagnosis of gout in patients with undifferentiated arthritis. Secondary, to explore the use and efficacy of uric acid lowering therapy (ULT) in daily clinical practice in new gout patients.

Methods: 1-year follow-up study was performed in subjects with unclassified arthritis, who had been classified as gout patients or not, according to the gout classification criteria, including imaging with dual-energy CT, but without ultrasonography and joint X-rays.(1) The reference was the clinical diagnosis (gout yes/no) after 1-year follow-up.

Results: 71 patients were included; their demographic and clinical characteristics are summarized in Table 1. All 63/71 patients classified as having gout at baseline also had a clinical gout diagnosis after one year, and of the patients not classified, none had the clinical diagnosis of gout at one year.