patients had hypovitaminosis D. In addition, an associated iron deficiency anemia was detected in 50% of the cases, biological stigma of digestive malabsorption in 40% of the cases and renal insufficiency in 15% of the cases. Standard radiographs showed diffuse demineralization in 90% of cases, Looser-Milkman streaks in 40% of cases and fractures in 30% of cases. Bone scintigraphy among 8 patients revealed diffuse hyperfixation in 4 cases (50%), localized hyperfixation in 3 cases (37%) and non conclusive images in only one case (12.5%). Bone densitometry performed in 5 patients showed secondary osteoporosis in 80% of cases. The diagnosis of osteomalacia was retained in 2 cases, celiac disease in 5 cases, renal insufficiency in 1 case, phosphate diabetes in 3 cases including Fanconi syndrome, hypophosphatasia in one case and tubular involvement as part of ankylosing spondylitis In one case. Etiology was a neoplastic cause in 4 cases including multiple myeloma. All the patients had a vitamin-calcium treatment (calcium intake between 500mg and 2g per day with an average of 2.5 cp/d, phosphorus in 3 cases and an etiological treatment in 3 cases. The resection of the tumor was the reason behind a clinical-biological improvement in the case of thyroid tumors. The outcome was favorable in the short term for all cases.

Conclusions: Osteomalacia is a generalized benign osteopathy, essentially linked to a deficiency in vitamin D often unrecognized. The diagnosis is simple and the treatment is easy, but the ignorance of the etiological forms can be responsible for an unfavorable evolution.

Disclosure of Interest: None declared

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AB0877 APPLICATION OF GOUT DIARY IN HEALTH EDUCATION OF GOUT PATIENTS

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Background: Gout is a heterogeneous disease characterized by increased levels of blood uric acid. It is difficult to achieve a comprehensive and effective control of gout only by drugs, drug therapy must be combined with health education, diet and lifestyle changes. However, most of the gout patients had wrong thinking about their disease, diet and drug therapy.The status of China's health education in gout patients:the research teams were dispersed and unstable, the content of health education needed to be further refined, the models of health education were very simple.Based on the traditional models of health education,the purpose of this study is to explore the effect of gout diary in gout patients, by recording gout diary in order to improve their daily life behaviors and related laboratory indexes,aim to provide a new method for health education of gout patients.

Objectives: In order to explore the effect of gout diary,we applied the gout diary in gout patients.

Methods: From January 2015 to December 2015,110 cases of gout hospitalized patients were randomly divided into study group and control group (n=55).The control group used traditional education models:patient education forum,gout handbook,patient group discussion,etc.Based on the control group,the research group used not only the traditional education models,but also added gout diary,the patient can record the diary by themselves.In order to evaluate the effect of gout diary,we used questionnaires and related laboratory indexes.

Results: The research group had significant improvement in laboratory indexes,healthy behaviors and life style ($P<0.05$),such as quit smoking, quit drinking, according to the doctors' suggestions, pay more attention to their blood uric acid and other laboratory indexes, see the doctor regularly, maintain ideal body weight,exercise regularly,working and resting regularly,keeping happy mood.

Conclusions: Apply the gout diary in gout patients, we can achieve a perfect effect.

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AB0878 EFFECT OF DIALYSIS AND LOW DOSE URATE-LOWERING ON SERUM URATE LEVELS IN PATIENTS WITH GOUT

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Background: The effect of dialysis on urate levels (sUA) in patients with gout has not been well characterized. No prospective series are available from the literature, and no recommendation has yet been made by either EULAR or ACR on the topic.

Methods: Exploratory, observational, prospective study. Patients with crystal-proven gout and at least one flare the previous year to entrance into dialysis program, either hemodialysis (HD) or home peritoneal dialysis (PD), were followed-up. No urate-lowering drug was prescribed for the first 3-month period, but low-dose allopurinol (50 mg/day) was to be prescribed from 6-month visit onwards if tophi (any subcutaneous or ultrasonographic >10 mm longest diameter) were present or febuxostat in case allopurinol was not clinically suitable. sUA levels previous to the first dialysis procedure were recorded, along with sUA levels pre-dialysis (pre-sUA) and immediately post-dialysis (for patients on hemodialysis) sUA (post-sUA) were obtained during follow-up at 3, 6, and 12 months of follow-up. No prophylaxis was prescribed, and only adrenocorticotropic hormone (ACTH) analogue or corticosteroids were to be used for the treatment of flares.

Results: 17 patients studied to date: 12 men, mean age 69 (IQ range 62–78). Time from onset of gout was 7years (IQR 1–10) pre-dialysis, and 2 patients entered into dialysis due to prolonged use of NSAIDs because recurrent, longstanding gout over 20 years. Allopurinol (n=6) and febuxostat (n=2) had been prescribed previously to dialysis procedures. ULT was prescribed to 10 patients: 4/4 patients on PD and 6/13 on HD as per in methods; patients treated were prescribed allopurinol 50 mg/day but one who showed HLA-B58 antigen and was treated with febuxostat 80 mg every 3 days. After 12 months 5 patients were lost for follow-up: 2 underwent a renal transplant, 3 were dialyzed at private centers. Follow-up ranged from 12 to 30 months.

There was a significant reduction in sUA at 3-month (Δ - 2.6 mg/dl), compared to baseline sUA. Reduction of sUA from 3–6-month and 3–12 month was greater in patients treated with ULT (Table).

The rate of flares at 3-month was similar in patients on HD (5/13) than in patients on PD (2/4), only one flare was reported at 6 month follow-up visits, none afterwards. No serious side effect was observed.

Table 1. Change in pre-sUA and post-sUA (mg/dl) globally and with interventions

Patients/sUA	0 month	3rd month	PostHD-3rd month	6th month	PostHD-6th month	12th	PostHD-12th month
All (N=17)	9.8	7.2	2.8	5.8	3.1	5.5	1.2
Not treated (N=10)	9.4	6.2	3.1	5.7	3.2	5.8	1.2
Treated from 6-month (N=7)	10.0	7.7	2.7	5.8	3.0	5.3	1.2
PD	10.2	8.0		6.0		5.0	
HD	9.7	6.9	2.8	5.7	3.0	5.7	1.2

Conclusions: In this exploratory study, dialysis is effective in reducing sUA levels. In hemodialysis, both sUa and postHD-sUA may be needed to better estimate the effect of interventions on sUA. Low dose ULT seems to be effective and may be considered to properly control sUA, but only to be considered in patients with severe (tophaceous) gout.

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AB0879 AN INTERNET TRIAL OF CHERRY EXTRACT VS. DIET MODIFICATION: PATIENT CHARACTERISTICS, GOUT SEVERITY AND DIET CHARACTERISTICS

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Background: Gout is often treated with life-long pharmacological therapies. Patients are interested in non-pharmacological interventions as adjunct to these therapies. To our knowledge, non-pharmacological have not been studied in detail.

Objectives: To describe the baseline characteristics of patients with gout enrolled in an Internet pilot study comparing the benefits and harms of diet modification to cherry extract intake.

Methods: Patients were enrolled over an 8-month period using the Internet. Diagnosis of gout was confirmed by contacting their health care provider. We describe the baseline characteristics of patients with physician-confirmed gout, who were randomized in the Internet gout study.

Results: We randomized 83 participants in an Internet gout pilot study, randomized to diet modification (n=43) or cherry extract (n=40); 3 patients withdrew before receiving intervention. The mean age of study participants was 56 years, (SD,

16), mean body mass index was 33 kg/m^2 (SD, 10), 73% were male; 67% were white Americans, 25% were African Americans and 7% other/mixed race/ethnicity. Participants took a median of 35 minutes to complete study assessment.
Almost half of the participants were taking medications for the treatment of gout: allopurinol, 42%; febuxostat, 1%, probenecid, 0%; colchicine, 29%. Forty-five percent participant were taking none of these medications. 41% smoked ever, 27% were using a special diet and participants had alcohol use an average of 2 days in the last week. Average number of gout flares were four in the last year. Dietary assessments showed that average daily intakes were as follows: calories, 2005; carbohydrate, 221 gm; fat, 82 gm; fiber, 19 gm; caffeine, 197 ml. The HEI2010 score of 64 was comparable to what was observed with NHANES for people in the average age range of this study.
Conclusions: Patients recruited in an Internet gout study, successfully responded to assessments, and had patient characteristics similar to gout populations described previously. The dietary assessments in this provide may provide a unique insight to design interventions to improve diet to improve gout outcomes.
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Disclosure of Interest: J. Singh Grant/research support from: Savient, Takeda, Consultant for: Savient, Takeda, Regeneron, Merz, Iroko, Bioiberica, Crealta and Allergan pharmaceuticals, WebMD, UBM LLC and the American College of Rheumatology, G. MCGWIN: None declared
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AB0880 PHARMACODYNAMIC EFFECTS AND SAFETY OF VERINURAD (RDEA3170) IN COMBINATION WITH ALLOPURINOL VERSUS ALLOPURINOL ALONE IN ADULTS WITH GOUT: A PHASE 2A, OPEN-LABEL STUDY

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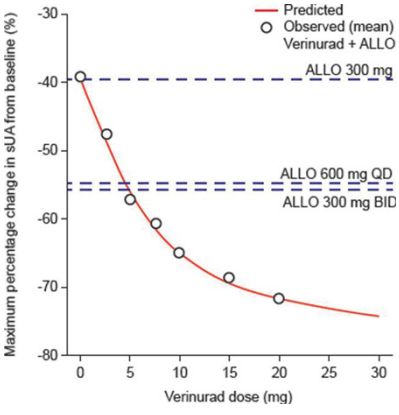
Background: Verinurad (RDEA3170) is a high-affinity, selective URAT1 inhibitor in development for the treatment of gout and asymptomatic hyperuricemia.
Objectives: This Phase 2a, randomized, open-label, multicenter study investigated the multiple-dose pharmacodynamics (PD), pharmacokinetics (PK), and safety of oral verinurad in combination with allopurinol versus allopurinol alone in adults with gout (NCT02498652).
Methods: Patients aged ≥18 and ≤75 years with gout and serum uric acid (sUA) ≥8 mg/dL were randomized to 1 of 2 cohorts to receive allopurinol (300 mg) in combination with verinurad (dose range 2.5 mg to 20 mg) and allopurinol 300 mg or 600 mg alone (each treatment period was 7 days). Medications were administered once daily ~30 min after breakfast (for allopurinol 300 mg b.i.d. group, the second allopurinol dose was in the evening). Colchicine 0.6 mg for gout flare prophylaxis was initiated at approximately Day -14 (start of urate-lowering therapy [ULT]) washout) or Day -7 if not on ULT. Serial blood and urine samples were measured on Days -1, 1, 7, 14, 21, 28, and 35 for PD and PK endpoints. Safety assessments included adverse events (AEs) and laboratory, electrocardiogram, and vital sign parameters.
Results: Forty-one patients were randomized (n=20–21 per cohort). Serum PD data pooled across cohorts demonstrated maximal % decrease in sUA from baseline (Emax)at 6–10 h after verinurad and allopurinol combination treatment. Addition of verinurad (2.5 mg to 20 mg) to allopurinol decreased sUA in dose-dependent manner (Figure). Greater sUA reductions were observed for dose combinations of verinurad ≥5 mg with allopurinol 300 mg versus allopurinol 600 mg alone, while allopurinol 600 mg once daily was equivalent to allopurinol 300 b.i.d. Emax was 46.9%, 58.9%, 59.9%, 67.1%, 68.4%, and 74.3% for verinurad at doses of 2.5, 5, 7.5, 10, 15, and 20 mg in combination with allopurinol 300 mg, versus 39.7%, 53.8%, and 54.4% with allopurinol 300 mg, allopurinol 600 mg, and allopurinol 300 mg b.i.d. alone. No drug-drug interaction on verinurad and allopurinol plasma PK parameters was observed.



Conclusions: Verinurad coadministered with allopurinol dose-dependently decreased sUA. All dose combinations of verinurad and allopurinol in this study were generally well tolerated with no serious AEs or renal-related events during combination treatment.
Disclosure of Interest: R. Fleischmann Grant/research support from: Ardea Biosciences, Inc., P. Winkle Employee of: Anaheim Clinical Trials, J. Miner Employee of: Ardea Biosciences, Inc., X. Yan Employee of: Ardea Biosciences, Inc., L. Hicks Employee of: Ardea Biosciences, Inc., S. Valdez Employee of: Ardea Biosciences, Inc., J. Hall Employee of: Ardea Biosciences, Inc., M. Hernandez-Illas: None declared
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AB0881 ASSESSMENT OF SUDOMOTOR FUNCTION IN PATIENT WITH GOUT

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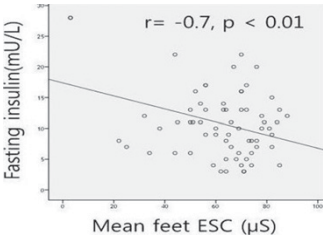
Background: Sodorimetry is a non-invasive device measures sweat gland dysfunction using electrochemical skin conductance (ESC) of hands and feet and is useful for assessing peripheral small fiber nerve function. Little is known about the dysfunction of peripheral small fiber nerve in patients with gout.
Objectives: To evaluate the prevalence and characteristics of small fiber neuropath (SFN) in patients with gout compared with a healty control group and to identify factors associated with SFN in gout.
Methods: 80 male patients with well symtom controlled gout (age: 58±12) and 80 healthy controls were enrolled. Each patient was required to fast over 8 hours before blood samples. Serum fasting glucose, fasting insulin, uric acid, serum 25-(OH) D, lipid profiles, Creatinine (Cr) and r-GTP were measured. Body mass index (BMI) and Homeostatic model assessment insulin resistance (HOMA IR) were calculated. Patients already diagnosed with hypertension and diabetes were excluded.
Results: The mean feet and hands ESC were significantly lower in the gout group than the control group. Mean Hands ESC was irrelevant to age, BMI, fasting glucose and insulin, HOMA-IR, vit D, uric acid, Cr, and lipids. However, mean feet ESC showed significant correlation with fasting glucose (r=-0.7, p<0.01) and HOMA-IR (r=-0.25, p=0.03).



Conclusions: Sudomotor function was significantly lower in patients with gout than the control group. Mean feet ESC was correlated with fasting glucose and insulin resistance in patients with gout. These results suggest that dysfunction of SFN in gout patients is associated with insulin resistance and impaired fasting glucose.
Disclosure of Interest: None declared
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AB0882 EFFICACY OF INTRALESIONNAL SODIUM THIOSULFATE IN DISABLING TUMORAL CALCINOSIS: ABOUT TWO CASES

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Background: Tumoral Calcinosis (TC) is a difficult-to-treat complication that can occur during the course of several diseases such as dermatomyositis or genetic hyperphosphatemia. It is a painful and disabling condition that can give rise to local complications including joint mobility reduction, cutaneous ulceration and superinfection. Until now, many treatments have been used with inconstant efficacy.
Objectives: Intravenous sodium thiosulfate gives promising results in calciphylaxis and ectopic calcifications, and intra-lesional injections could be effective for tumoral calcinosis.