0.012~0.132, $P=0.018$) and trunk BF% ($\beta=0.152$, 95%CI 0.043~0.261, $P=0.007$), but not limb BF%, were positively correlated with sUA.

Figure 1 Clinical characteristics and body composition of gout patients

Characteristics	All patients (n=362)	Grouped by gender			Male patients grouped by overfat		
		Male (n=348)	Female (n=14)	P	Overfat (n=187)	Non-overfat (n=161)	P
Age, years	38(30, 52)	38(30, 50)	66(59, 72)	<0.001	38(30, 51)	37(30, 50)	0.969
Duration, years	3(2, 7)	3(2, 7)	3(1, 6)	0.423	4(2, 7)	3(1, 6)	0.163
Count of affecting joints	3(2, 4)	3(2, 4)	3(1, 5)	0.494	4(2, 6)	3(2, 5)	0.002
Family history, n (%)	130(35.9)	124(35.6)	6(42.9)	0.581	74(39.6)	56(31.1)	0.098
Tophi, n (%)	65(18.0)	64(18.4)	1(7.1)	0.472	36(19.3)	28(17.4)	0.655
Serum uric acid, mg/dl	9.232.2	9.232.2	9.232.5	0.957	9.622.1	8.732.2	<0.001
eGFR, ml/min/1.73m ²	83.8217.0	84.3216.9	70.4211.7	0.002	85.1118.2	83.5115.3	0.395
Urolithiasis, n (%)	88(24.3)	85(24.4)	3(21.4)	0.795	49(26.2)	36(22.4)	0.405
Hypertension, n (%)	139(36.7)	124(35.6)	9(64.3)	0.029	82(44.4)	41(25.5)	<0.001
Diabetes mellitus, n (%)	36(9.9)	33(9.5)	3(21.4)	0.313	20(12.3)	10(6.2)	0.053
Dyslipidemia, n (%)	228(63.0)	218(62.4)	10(71.4)	0.504	131(70.1)	87(54.0)	0.002
Body mass index, kg/m ²	25.513.6	25.513.6	25.733.1	0.882	27.453.3	23.323.6	<0.001
Obesity, n (%)	79(21.8)	77(22.1)	2(2.5)	0.392	78(39.0)	4(2.5)	<0.001
Waist circumference, cm	90.819.4	90.819.5	89.337.4	0.551	95.918.3	85.017.2	<0.001
Metabolic syndrome, n (%)	165(45.6)	158(45.4)	7(50.0)	0.735	114(61.0)	44(27.3)	<0.001
Fatty liver, n (%)	172(47.5)	165(47.4)	7(50.0)	0.849	100(57.8)	57(33.4)	<0.001
Coronary heart disease, n (%)	8(2.2)	4(1.7)	2(14.3)	0.027	3(1.6)	5(3.1)	0.100
BF%, %	25.826.4	25.562.2	35.025.0	<0.001	30.113.8	20.113.7	<0.001
Overfat, n (%)	194(53.6)	187(53.7)	7(50.0)	0.783	187(100)	0(0)	<0.001
Trunk BF%, %	13.313.7	13.113.6	17.922.8	<0.001	15.811.9	10.112.4	<0.001
Limb BF%, %	11.023.7	10.712.8	18.110.2	0.017	12.712.1	8.411.5	<0.001
Trunk/limb BF% ratio	1.2230.15	1.2230.14	1.1010.24	0.003	1.2350.11	1.1910.17	<0.001

eGFR: estimated glomerular filtration rate; BF%: body fat percentage; ASM: appendicular skeletal muscle index.

Conclusion: The characteristics of fat distribution in male gout patients is more in trunk and trunk BF% is positively correlated with sUA.

Disclosure of Interests: None declared

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SAT0416 ULTRASOUND EVALUATION IN FOLLOW-UP OF URATE-LOWERING THERAPY IN GOUT PHASE 2 (USEFUL-2): DURATION OF FLARE PROPHYLAXIS

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Background: Recent studies showed that ultrasonography (US) could be useful for managing urate-lowering therapy (ULT) in gouty patients. In the first phase of the present study (USEFUL-1), we suggested that US was an accurate tool to follow monosodium urate (MSU) crystal dissolution under efficient ULT.

For gout flare after starting ULT, prophylaxis is recommended during the first 6 months of ULT. The duration of gout flare prophylaxis over the 6 months is consensual with a grade B recommendation. However, little is known about the probability of relapse according to the urate load modification.

Objectives: To determine whether a modification of US features of MSU crystal deposition is associated with reduced number of flares after stopping gout flare prophylaxis.

Methods: We performed a 1-year multicentre prospective study including patients with proven gout and US features of gout. The first phase of the study was a 6-month US follow-up after starting (ULT) with gout flare prophylaxis. After 6 months of ULT, gout flare prophylaxis was stopped, followed by a clinical follow-up (month [M] 6 to 12). Outcomes were the proportion of patients with relapse between M6 and M12 according to the modification of US features of gout and determining a threshold decrease in tophus size according to the probability of relapse.

Results: We included 79 patients with gout (mean $\pm$ SD) age 61.8 ± 14 years, 91% males, disease duration 6.3 ± 6.1 years). Among the 49 completers at M12, 23 (47%) experienced relapse. Decrease in tophus size $\geq 50\%$ at M6 was more frequent without than with relapse (54% vs 26%, $P=0.049$). On ROC curve analysis, a threshold decrease of 50.8% in tophus size had the best sensitivity/specificity ratio to predict relapse. Probability of relapse was increased for patients with a decrease in

tophus size $<50\%$ between baseline and M6 (OR 3.35 [95% confidence interval 0.98; 11.44]).

Conclusion: A high reduction in US tophus size is associated with low probability of relapse after stopping gout prophylaxis. US follow-up may be useful for managing ULT and gout flare prophylaxis.

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SAT0417 HOW EFFECTIVE IS GOUT EDUCATION PROGRAMME TO IMPROVE GOUT KNOWLEDGE AMONG PRIMARY CARE DOCTORS?

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Background: Gout is a potentially curable disease with simple pharmacological treatment, although its management remained suboptimal.^{1, 2} A disconnection between primary care doctors who treat gout most frequently, and rheumatologists who lead the development of gout management guidelines, is one of the challenges in managing gout in primary care.³ A concerted effort is needed to improve the quality of care of patients with gout and this includes physician education.⁴

Objectives: To determine the effectiveness of gout educational programme in improving gout knowledge among primary care doctors.

Methods: A gout education programme consisted of five 20-minute presentations on gout (challenges in gout, principles of gout management, treat to target, disease burden and gout diet) and a session on case discussion of two gout cases was conducted for primary care doctors. Participants were invited to complete the same set of questions distributed before (pre-test) and after (post-test) the programme. A set of 10 true/false multiple choice questions (MCQ) based on a clinical scenario of a patient with gout was constructed and vetted by two rheumatologists. Comparison between the pre-test and post-test scores were analysed using paired t-test.

Results: Forty-four primary care doctors who attended gout educational programme, answered pre-test and post-tests and the scores are shown in Table 1. The scores for recall questions were higher than application questions. The mean scores for recall questions in post-test were significantly higher compared to pre-test (4.35 ± 0.73 vs 3.51 ± 0.47 , $p < 0.01$) but not significant for application questions (2.91 ± 0.71 vs 2.79 ± 0.62 , $p = 0.56$). Less than half of participants obtained correct answers for 13 out of 50 options in the pre-test mainly in questions 2, 3, 4, 6 and 7. (Table 1)