Table 2. Clinical outcomes and adverse events

	Off TCZ (N = 60)	On TCZ (N = 60)
Follow-up time, median (IQR), years	0.60 (0.20-1.57)	0.59 (0.32-1.50)
Patients with ≥ 1 relapse, n (%)	43 (71.7)	18 (30.0)
1 relapse	19 (31.7)	11 (18.3)
2 relapses	11 (18.3)	3 (5.0)
3 relapses	4 (6.7)	3 (5.0)
≥ 4 relapses	9 (15.0)	1 (1.7)
Time to relapse, median (IQR), years	0.5 (0.3-0.7)	2.1 (0.6-2.6)
Annual relapse rate (95% CI), events per year*	1.43 (0.95-2.13)	0.57 (0.33-0.98)
Patients with ≥ 1 AE, n (%)	29 (48.3)	32 (53.3)
AEs attributed to GC†	52 / 59 (88.1)	38 / 81 (46.9)
AEs attributed to TCZ‡	NA	27 / 81 (33.3)
AEs attributed to GC or TCZ†	52 / 59 (88.1)	53 / 81 (65.4)
Patients with ≥ 1 SAE, n (%)	6 (10.0)	6 (10.0)
SAEs attributed to GC	7 / 8 (87.5)	4 / 9 (44.4)
SAEs attributed to TCZ	NA	3 / 9 (33.3)
SAEs attributed to GC or TCZ	7 / 8 (87.5)	6 / 9 (66.7)

AE, adverse event; CI, confidence interval; GC, glucocorticoids; IQR, interquartile range; NA, not applicable; SAE, serious AE; TCZ, tocilizumab.

* Rates are estimated from a Poisson regression model with ongoing treatment (TCZ and GC combinations), age, smoking history, new or relapsing GCA as covariates, and random patient effect.

† Multiple occurrences of AEs are included. Denominators are all AEs or SAEs.

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SAT0249 IGA VASCULITIS ASSOCIATED WITH INFLAMMATORY BOWEL DISEASE. A RETROSPECTIVE STUDY

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Background: Leukocytoclastic vasculitis has been reported in patients with inflammatory bowel disease (IBD) but cases of IgA vasculitis (IgAV) in IBD are considered rare.

Objectives: The purpose of this study was to describe the baseline characteristics and outcome of a series of patients with IBD and IgAV.

Methods: Biopsy-proven IgAV-patients with prior history of IBD were identified retrospectively at Mayo Clinic, Rochester, MN. Data were abstracted from direct medical chart review. Each IBD-IgAV case was matched to two controls with IgAV but without IBD history based on age, sex and baseline renal function at time of IgAV onset.

Results: A total of 9 patients were included in the study group (6 male, 3 female). Crohn's disease (CD) and Ulcerative Colitis (UC) were present in 7 and 2 patients, respectively. The mean length of time between IBD diagnosis and onset of IgAV was 17.3±19.9 years. For patients on biologic treatment for IBD, the mean length of time between initiation of biologic and onset of IgAV was 3.3±3.8 years (range 0-12 years). Active IBD at IgAV-onset was present in 56% (5/9) of patients.

Tumor necrosis factor inhibitors (TNFi) were the most frequent biologics used for IBD (8, 89%); infliximab was the most common (7, 78%). At IgAV-onset, only 5 patients were on treatment with TNFi; two subsequently discontinued, two switched to another TNFi (adalimumab), and one patient continued. At last follow-up, two of three patients that remained on TNFi had full resolution of IgAV despite ongoing TNFi use. Comparison of baseline characteristics between cases with IBD-IgAV and matched non-IBD IgAV controls is demonstrated in Table 1. No differences were seen in regards to development of end-stage renal disease, resolution of hematuria and/or proteinuria, time to complete IgAV response or first IgAV relapse.

Conclusion: Baseline characteristics and outcomes of patients with IBD-IgAV are similar to those with IgAV without IBD. Development of IgAV is not limited to patients with clinically active IBD. Whether use of TNFi is related to the pathogenesis of IgAV in some patients with IBD remains unclear. Further research into the pathophysiologic connection between IBD and IgAV is needed.

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Table 1: Baseline characteristics of patients with inflammatory bowel disease and immunoglobulin-A vasculitis compared to patients with IgAV without inflammatory bowel disease

Characteristic	IBD-IgAV (n=9)	Non-IBD IgAV (n=18)	p-value
Age at IgAV diagnosis, years*	40.8±17.5	40.7±17.4	0.96
Male sex	6 (67%)	12 (67%)	1.00
Length of follow-up, years*	1.3±2.6	1.1±1.2	---
Creatinine, mg/dL*	1.0±0.4	0.9±0.3	0.59
eGFR (ml/min/1.73m ²)*	91.4±31.6	96.4±22.9	0.72
C-reactive protein, mg/L*	23.3±12.2	27.0±27.4	0.62
Renal involvement	7 (78%)	10 (56%)	0.26
Microscopic hematuria	5 (56%)	7 (39%)	0.41
Proteinuria	7 (78%)	8 (44%)	0.10
Palpable purpura	9 (100%)	18 (100%)	1.00
Abdominal Ischemic symptoms	3 (33%)	2 (11%)	0.161
Disease status at IgAV diagnosis			
Active IBD	5 (56%)	-	-
TNF-α inhibitor at diagnosis	2/5 (40%)	-	-
○ Ever TNF-α inhibitor	5/5 (100%)	-	-
Inactive IBD	4 (44%)	-	-
TNF-α inhibitor at diagnosis	3/4 (75%)	-	-
○ Ever TNF-α inhibitor	3/4 (75%)	-	-

IBD, inflammatory bowel disease; IgAV, immunoglobulin-A vasculitis; eGFR, estimated glomerular filtration rate; TNF-α, tumor necrosis factor-α inhibitor.

*Mean ± standard deviation

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SAT0250 MUSCLE INVOLVEMENT REVEALED BY 18F-PET-CT IN POLYMYALGIA RHEUMATICA

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Background: Imaging techniques in polymyalgia rheumatica (PMR) have revealed mainly bursitis, tenosynovitis, capsulitis and enthesitis. This is also the case for 18F-FDG-PET-CT. This technique, which has shown its interest in the diagnosis of PMR, allows an assessment of the metabolic activity of the entire musculoskeletal system and in particular of muscle structures.

Objectives: The objective of this work was to evaluate muscle damage using 18F-FDG-PET-CT in PMR.

Methods: This is a retrospective study including patients with PMR (ACR/EULAR 2012 criteria) seen in our department, who had an 18F-FDG PET-CT examination between September 2012 and November 2018. A control group consisting of subjects without rheumatological manifestations who had such an examination as part of neoplastic research or neoplastic disease control was also evaluated. PET evaluation included 17 sites suggestive of PMR, as previously reported [1], leading to a global PET score ranging from 0 to 51. Muscle hypermetabolism areas were similarly rated according to the same Goerres classification [2] (0 = no uptake; 1 = slight uptake, less than liver; 2 = uptake like liver; 3 = uptake higher than liver). Muscle activity sites have been identified. A comparison of PMR patients with and without muscle involvement was performed using the Mann Whitney or Fisher's exact test.

Results: 134 cases were reviewed, concerning 80 PMR (mean age 67.9) and 54 "controls" (mean age 68.1). Overall, PET muscle damage was observed in 27 cases (34%) in PMR and 6 cases (11%) in controls ($p=0.004$). The damage is bi or multi-focal in 16/27 cases. The affected sites are: thighs and ischium-leg ($n = 10$), spinal (11), piriform/buttocks (7), pectoral (5), large serrated (4), subspinatus/subscapular (3), deltoid (1), trapezius (1). Fasciitis was found in 4 cases. As expected, PMR patients exhibited higher TEP scores than controls ($p<0.001$). In PMR patients, PET muscle involvement was associated with higher ESR values ($p<0.05$), but not with age, CRP or global PMR PET score.

Conclusion: Muscle involvement assessed by ^{18}F -Fluorodeoxyglucose PET-CT is frequent in PMR (1/3), located at usual sites of symptoms of the disease, without association with age, CRP levels or global PET score for PMR. Muscle should be carefully evaluated during PET in cases of PMR; these pictures may be a new diagnosis feature of the disease.

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SAT0251

SEX- AND AGE-RELATED DIFFERENCES IN CLINICAL MANIFESTATIONS OF BEHÇET'S DISEASE IN A LARGE COHORT OF CHINA PATIENTS

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Background: Behçet's disease (BD) is a systemic vasculitis with multiple symptoms such as recurrent oral and/or genital ulceration, skin lesions, ocular lesions, and other systems affection. Studies have been conducted to reveal sex- and age-related differences in clinical characteristics of BD in several countries¹⁻⁵, but up to now sex and age influence for Chinese BD patients is very limited.

Objectives: This study aimed to investigate the clinical phenotypes of BD concerning gender and age in China.

Methods: We retrospectively reviewed the medical records of BD patients followed up in the Departments of Rheumatology, Peking Union Medical College Hospital (PUMCH) between March 2014 and January 2019. Demographics, clinical features at onset and during follow-up were obtained from a review of medical records.

Results: A total of 489 BD patients were included in our database: 286 males (58.49%) and 203 females (41.51%) (Sex ratio M/F was 1.41), with a median age of 34 years (interquartile range: 28-44 years). Recurrent oral ulceration was the most common manifestation (96.32%), followed by genital ulceration (71.17%), skin lesions (57.67%), vascular lesions (25.36%), and ocular involvement (24.13%). Gastrointestinal (GI) involvement (15.13%), positive pathergy test (14.11%), and neurological involvement (5.93%) were less frequently observed. The comparative study between males and females revealed that ocular lesions (28.67% vs 17.73%, $P=0.005$), vascular lesions (31.47% vs 16.75%, $P<0.001$) and positive pathergy test (17.83% vs 8.37%, $P=0.002$) were more common in male, while genital ulceration was more common in female (64.34% vs 80.79%, $P<0.001$). Regarding age difference, ocular lesions ($P=0.017$) were more frequently observed in younger patients, while vascular lesions ($P=0.024$) and GI symptoms ($P=0.010$) were more common in older patients. Gender differences of these manifestations were more prominent in certain age groups among 20-50 years old than other groups.

Conclusion: These analyses support that the clinical features of Chinese BD were different depending on sex and age.

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Scleroderma, myositis and related syndromes

SAT0252

AN EVALUATION OF THREE DIFFERENT METHODS TO EVALUATE SKIN IMPAIRMENT IN SYSTEMIC SCLEROSIS PATIENTS

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Background: One of the characteristics of systemic sclerosis (SSc) is an increase in dermal thickness (DT) (1-3). Although the standard method to evaluate the extent of skin involvement is the modified Rodnan skin score (mRSS) (3,4), high frequency ultrasounds (US) and the plicometer skin test (Plicometry) (5-8) are now being used in SSc patients.

Objectives: The aim of this study was to determine any correlations between mRSS, US and Plicometry during the evaluation of skin impairment in SSc patients.

Methods: A total of 63 SSc patients (mean age 64±13SD years, mean SSc duration 7±6 years) and 63 healthy subjects (HS) (mean age 64±12SD years) were enrolled.

The three methods (mRSS, US and Plicometry) were used to evaluate skin impairment in the seventeen areas of the skin usually evaluated by mRSS (face, fingers, dorsum of hands, forearms, arms, chest, abdomen, thighs, legs and feet) and the total score was calculated, as previously reported (1,3,4,8). Intra-rater reliability of the three techniques was assessed by having the same rater performing 2 consecutive measurements at each skin site. Statistical evaluation was performed by non-parametric tests.

Results: A significant positive correlation was observed between the three methods used to evaluate DT in the SSc patients (mRSS vs US $r=0.64$, $p<0.0001$; mRSS vs Plicometry $r=0.97$, $p<0.0001$; US vs Plicometry $r=0.55$, $p<0.0001$). Conversely, there was no correlation between these parameters in the CNT group ($p>0.05$). The intraclass correlation coefficients for mRSS was 0.95, 0.97 for US and 0.96 for Plicometry. Data collection for mRSS took almost 10 minutes, 15 minutes for Plicometry and 20 minutes for US.

Conclusion: This study demonstrates a significant relationship between mRSS, US and Plicometry in the DT evaluation of SSc patients. The SSc patients had statistically significantly higher values than HS when the 3 techniques were used to evaluate the seventeen skin areas.

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