(azathioprine, cyclophosphamide, mycophenolate mofetil), independently by the ILD pattern and 21 (70%) low dosage of steroids.

After a median period of 23.5 months (range 11-111), 7 patients developed an ANCA associated vasculitis, while other 3 developed other rheumatic diseases. Finally, when compared with IPF, ILD-MPO patients had a better survival (81.2 ± 0.9 vs 54.7 ± 0.7 for ILD-MPO and IPF, respectively; $p=0.045$)

Conclusion: ILD positive for anti-MPO antibodies are still a not definite condition. We need larger population to identify possible markers for the evolution in an ANCA associated vasculitis, to define the prognosis of disease and the better therapeutic approach.

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AB0529 TEMPORAL ARTERY ULTRASOUND (TAUS) IS A RELIABLE TECHNIQUE TO RULE OUT GCA EVEN IN THE LEARNING PHASE

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Background: Giant cell arteritis (GCA) is an emergency. The initial treatment with high dose glucocorticoids (GC) is often started on clinical suspicion without waiting for Temporal artery biopsy (TAB) results, which can take days to be available. TAUS is a simple, non-invasive test which is readily available. However, like any other ultrasound, it is also operator dependent. A positive halo sign is the most specific abnormality seen on TAUS in GCA patients. The percentage of false positive TAUS in GCA diagnosis is low (1), but it can result in over diagnosis and unnecessary exposure to high dose GC in elderly population.

Objectives: We looked at the reliability of TAUS in ruling out GCA after it was introduced within our rheumatology department one year ago.

Methods: We adopted the quality improvement methodology for assessment. Retrospective data of suspected GCA patients was collected over the last two years. TAUS was introduced regularly to the investigative plan after eleven months. Two Rheumatology consultants were trained in TAUS. Results were compared before and after the introduction of ultrasound as a diagnostic tool. In collecting the data, our main focus for documentation was based on clinical symptoms, TAUS and TAB results. We aimed to increase the awareness of appropriate GCA referrals among the primary and secondary care with the support of teaching sessions.

Results: From January 2018 to November 2019, 101 patients were referred to rheumatology with suspected GCA. Median age of our cohort was 72 years with male to female ratio of 1:3. 35 patients were referred in the first 11 months out of which, 10 (28.6%) were diagnosed with GCA. TAUS and TAB was done in 20% and 49% of patients respectively. 66 patients were referred in the next 12 months after TAUS was introduced. Out of 66, 14 patients (21.2%) were diagnosed as GCA. TAUS and TAB were done in 82% and 38% of the patients respectively. As listed in table 1, only 1 patient was found to have positive TAB after a negative TAUS (false negative). All of patients with positive TAUS were treated as GCA on the basis of clinical grounds, irrespective of TAB results. Despite the regular use of TAUS as a diagnostic tool in the second phase, there is a higher percentage of patients (78.8%) in which GCA was ruled out.

TAUS introduction	Before regular TAUS (Jan 2018 – Nov 2018)	After regular TAUS (Dec 2018 – Nov 2019)
Patients referred	35	66
GCA	10 (28.6%)	14 (21.2%)
Not GCA	25 (71.4%)	52 (78.8%)
TAUS done in	20%	82%
TAB done in	49%	38%
TAUS -ve and TAB +ve	0	1
TAUS +ve and TAB -ve/not done	2	8

Conclusion: After the routine introduction of TAUS, the percentage of patients diagnosed with GCA has declined and clinicians have been able to exclude suspected GCA diagnosis in a larger proportion of patients referred. This is noteworthy as our Rheumatologists are still in the learning phases of determining the significance of utility of TAUS. There is only a small decline in TAB frequency, which is expected to go down further in the coming years. We also noticed that

the number of patients referred has almost doubled. This might be due to better education and awareness at the primary and secondary care level which was done as part of the project.

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AB0530 CHARACTERISTICS AND MEDIUM-TERM OUTCOMES OF TAKAYASU ARTERITIS-RELATED RENAL ARTERY STENOSIS: ANALYSIS OF A LARGE CHINESE COHORT

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Background: The incidence of renal artery stenosis in Takayasu arteritis (TA) was 20%–60% according to previous reports. The specific characteristics of patients with TA-related renal artery stenosis and the effect of revascularization procedures on prognosis have not been fully investigated.

Objectives: To investigate the characteristics of patients with TA-related renal artery stenosis and identify the predictors of medium-term adverse outcomes.

Methods: Data for 567 patients registered in a large prospective observational cohort-the East China Takayasu arteritis cohort-up to April 30, 2019, were retrospectively analyzed.

Results: Renal artery stenosis was confirmed in 172/567 (30.34%) patients, with left renal artery involvement seen in 73/172 (42.44%) patients. Renal insufficiency at presentation (HR = 2.37, 95% CI: 1.76-15.83, $p = 0.03$), bilateral renal artery involvement (HR = 6.95, 95% CI: 1.18-21.55, $p = 0.01$), and severe (>75%) stenosis (HR = 4.75, 95% CI 1.08-11.33, $p = 0.05$) were predictors of adverse outcomes. Revascularization was performed for 46/172 (26.74%) patients. Patients without preoperative treatment had higher rate of restenosis (44.44% vs. 15.79%, $p < 0.01$) and hypertension deterioration (25.93% vs. 10.53%, $p < 0.01$) after the procedure. Non-receipt of preoperative treatment (HR = 6.5, 95% CI: 1.77-32.98, $p = 0.04$) and active disease at revascularization (HR = 4.21, 95% CI 2.01-21.44, $p = 0.04$) were independent predictors of adverse outcomes after revascularization.

Conclusion: Patients with uncontrolled or worsening hypertension or/and renal function may benefit from revascularization. Those who have received preoperative treatment may have more favorable revascularization outcomes. Prognosis appears to be poorer for patients with renal insufficiency at presentation, bilateral artery involvement, and severe stenosis.

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AB0531 GOLIMUMAB IN THE TREATMENT OF SEVERE AND/OR REFRACTORY VASCULO-BEHÇET'S DISEASE: A SINGLE-CENTRE EXPERIENCE IN CHINA

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Background: Vascular involvement is one of the leading causes of mortality and morbidity in Behçet's Disease (BD)¹. Surgical treatments are difficult for Vascular BD (VBD) patients due to the high risk of serious postoperative complications without effective and promptly perioperative immunotherapy^{2,3}. Anti-tumor necrosis factor alpha (TNF- α) therapy has been reported as a potential treatment in severe VBD, e.g. infliximab (IFX) and adalimumab (ADA). However, only few case reports are available regarding the fully humanized monoclonal antibody to TNF- α , golimumab (GOL), in the management of VBD⁴.

Objectives: The objective of this study was to report the efficacy and safety of GOL for the treatment of severe and/or refractory VBD.

Methods: We retrospectively analyzed the efficacy and safety profile of patients with severe and/or refractory VBD treated with GOL in our medical center between 2018 to 2020.

Results: Nine VBD patients (8 male and 1 female) were enrolled, with a mean age and median course of 37 ± 8.6 years and 72 months (range 12 to 300), respectively. Cardiac involvements (severe aortic regurgitation secondary to BD) were presented in 7 patients, including 2 patients with post-operative paravalvular leakage (PVL) after aortic valve replacement surgery. Multiple vascular lesions were documented in the other 2 patients, including one patient with life-threatening multiple pulmonary aneurysms, pulmonary thromboembolism and recurrent deep vein thrombosis, and another patient with abdominal aortic pseudoaneurysm and multiple artery stenosis and occlusion. Prior to GOL therapy, all patients experienced disease progression despite high-dose glucocorticoids combined with multiple immunosuppressants. Moreover, seven patients required effective and fast control of inflammation and a decrease of glucocorticoid dose during the perioperative period. They were treated with GOL, 50mg every 4 weeks, in combination with background low-or medium-dose glucocorticoids and immunosuppressants, for a median of 6 (range 3-15) months. After a mean duration of follow-up of 10 (range 2-6) months, all patients achieved improvement both in clinical symptoms and serum inflammation markers. The ESR level [4.88 ± 4.94 mm/h vs 31.13 ± 31.78 mm/h, $P < 0.01$] and CRP level [1.9 (0.11-3.73) mg/L vs 24.3 (0.4-85.57) mg/L, $P < 0.01$] significantly decreased. The dosage of glucocorticoid [10 (0-15) vs 40 (0-100) mg/d, $P < 0.01$] effectively tapered, indicating a potential steroid-sparing effect. No newly-onset aneurysm and recurrent venous thrombosis were observed. Also, one patient had a marked reduction in size and number of pulmonary aneurysms. No post-operative PVL was observed in the five patients after Bentall operation with a median follow-up of 10 months. One patient with severe aortic regurgitation remained stable and without surgical intervention with the treatment of GOL for 16 months. No severe complication occurred in one patient after underwent endovascular repair of abdominal aorta for 8 months. GOL was well-tolerated, and no serious adverse event was observed.

Conclusion: Our results suggested that GOL is safe and effective for the treatment of patients with severe and / or refractory VBD. Further controlled studies are warranted to confirm the therapeutic potential of GOL in VBD patients.

Disclosure of Interests: None declared

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AB0532

CORRELATION WITH THE FREQUENCY OF DISEASE RELAPSES DURING THE FIRST 3 YEARS FROM THE DIAGNOSIS AND DISEASE OUTCOMES IN BEHCET'S SYNDROME

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Background: Beside the organ involvement, a number of demographic factors could considerably influence the long-term and short-term outcomes of Behçet's syndrome (BS): age at disease onset, duration of disease, gender and sex. Younger men patients are more suitable to have a more severe disease, due to an increased frequency both of morbidity and mortality, related to ocular, vascular and neurological involvement

Objectives: The primary aims of the study were to evaluate disease activity in a cohort of BS patients consecutively followed in a BS clinic of a tertiary centre and to explore whether there is a correlation between frequency of relapses in the first 3 years of diseases and disease outcomes.

Methods: One-hundred and sixty-five patients (91 males and 74 females; mean age 39 ± 9 years, mean disease duration 9 ± 5) with a diagnosis of BS according to the ISG criteria were studied. Disease activity has been evaluated by BDCAF and patients were also categorized in major or minor involvement of BS according or not to the presence of ocular, neurological and vascular involvement in the course of disease. The numbers of relapses in the first 3 years from diagnosis were correlated with disease outcome and damage.

Results: At time of the evaluation, 47% of BS patients presented an active disease; 69 patients presented muco-cutaneous involvement, 39 ocular disease, 21 joint involvement, 12 neurological impairment and 9 gastro-enteric involvement. Seventy-nine percent of patients presented in the course of the disease a severe BS involvement and the majority was represented by patients characterised by a more frequent relapse in the first 3 years of disease (M/F: 65/48, mean age 43 ± 3 years). Those patients who experienced a more higher number of relapse in the first 3 years compared to the others were also characterised by poor disease outcomes and worse prognosis over time and this correlation was independent by the therapies taken.

Conclusion: The high frequency of relapses during the first three years from diagnosis may be considered an important prognostic factor for disease outcome in BS patients, therefore could be taken into account as a useful element to tailor

the management, not only according to the type and severity of symptoms and epidemiological factors.

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AB0533

ANTI-NEUTROPHIL CYTOPLASMIC ANTIBODY (ANCA) IN GENERAL POPULATION WITHOUT ANCA ASSOCIATED VASCULITIS

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Background: Currently it is hypothesized that many systemic autoimmune diseases occur due to environmental risk factors in addition to genetic risk factors. Anti-Neutrophil Cytoplasmic Antibody (ANCA) is mainly associated with three systemic autoimmune disease including granulomatosis with polyangiitis (GPA), microscopic polyangiitis (MPA), eosinophilic granulomatosis with polyangiitis (EGPA). It is known that ANCA can be positive before clinical symptoms in patients with known diagnosis of GPA and ANCA titers rise before clinical manifestations appear. However, prevalence of ANCA among general population is not well known. It has not been described as well how many of people with positive ANCA eventually develop clinical manifestations of ANCA associated Vasculitis.

Objectives: This study aims to estimate prevalence of ANCA in general population without ANCA associated Vasculitis. It also describes natural disease course of people with positive ANCA without ANCA associated Vasculitis. Risk factors for positive ANCA are also analyzed.

Methods: This is a single center retrospective study at Center for Preventive Medicine of St. Luke's International Hospital in Tokyo. ANCA was checked among the patients who wished to between 2018 and 2019. St. Luke's Health Check-up Database (SLHCD) was utilized to collect the data. The patients whose serum was measured for ANCA were identified. The data for basic demographics, social habits, dietary habits and laboratory data were extracted. The charts of the patients with positive ANCA were reviewed.

Results: Sera of total 1204 people were checked for ANCA. Of these 1204 people, 587 (48.8%) are male and the mean age was 55.8 years (32.6 to 79). There were total 11 patients with positive ANCA. Myeloperoxidase ANCA (MPO-ANCA) was positive for 3 patients and proteinase 3 ANCA (PR3-ANCA) was positive for 8 patients. Of these 11 patients, 5 were male (45.5%) and the mean age was 54.6 years. Two patients had history of autoimmune disease (primary biliary cirrhosis and ulcerative colitis). Five patients were evaluated by rheumatologists with the median follow-up period of 274 days. None of them developed clinical signs and symptoms of ANCA associated Vasculitis. Four out of five patients had ANCA checked later, two of which turned negative. The prevalence of ANCA in this cohort was 0.9% (95% confidence interval [95% CI]: 0.5% to 1.6%). Univariate analysis was performed to identify risk factors of positive ANCA. The variables analyzed include age, gender, body mass index (BMI), smoking habits, alcohol intake, dietary habits (fruits, fish, red meat), hypertension, dyslipidemia, and laboratory data. None of these variables demonstrated statistically significant differences except for positive rheumatoid factor (ANCA positive group: 33 % vs ANCA negative group: 9.1%, p value = 0.044).

Conclusion: The prevalence of ANCA in this cohort was 0.9% (95% CI: 0.5% to 1.6%). None of them who had a follow-up developed ANCA associated Vasculitis during the follow-up period. Longer follow-up and more patients are necessary to determine natural course of people with positive ANCA.

Disclosure of Interests: None declared

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AB0534

EFFICACY OF TOCILIZUMAB IN LARGE-VESSEL GIANT CELL ARTERITIS: A SINGLE-CENTER REAL-LIFE EXPERIENCE

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Background: In a significant proportion of giant cell arteritis (GCA) patients, large vessels (LV) are affected¹. GiACTA trial showed tocilizumab (TCZ) to be effective for the treatment of GCA² but did not differentiate between patients with and without LV involvement and did not evaluate LV-imaging response.

Objectives: To assess efficacy of TCZ in LV-GCA, evaluating both clinical symptoms and vascular inflammation on PET scan.