THU0565 MACROPHAGE ACTIVATION SYNDROME IN ADULTS WITH INFLAMMATORY RHEUMATIC DISEASES

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Background: Macrophage activation syndrome (MAS) is a rare hyperinflammatory condition characterised by macrophage activation and infiltration resulting in a multi organ damage. MAS is considered to be a type of secondary hemophagocytic lymphohistiocytosis. It is a life threatening complication of various autoimmune or autoinflammatory rheumatic diseases, particularly systemic juvenile idiopathic arthritis (sJIA). Clinical manifestations include hepatosplenomegaly, increase of liver function tests, pancytopeny, neurolological manifestations etc. High doses of glucocorticosteroids (GC), cyclosporine A (CyA) and etoposide are a treatments of choice. In refractory cases biologicals may be an option, too.
Objectives: To point out this very rare but severe complication may occur also in adult patients with rheumatic diseases.
Methods: We report 4 successfully treated cases of adult MAS in rheumatic patients seen in our clinic during the years 2009 – 2016. A review of the literature regarding the efficacy of biologics in MAS treatment is also presented.
Results: We have observed four patients with MAS, two with adult onset Still disease (AOSD), one with rheumatoid arthritis (RA) and one with sJIA. All of the patients were young (20 -33 years, mean age 27,0±5,61 years) with the duration of the primary disease ranging from 9 months to 11 years (mean 4,18±4,01 years). Three patients were in remission of the primary diseases prior to MAS manifestation, only in the last and most severe patient (AOSD) the activity of the underlying disease was not controlled. A demographic and clinical characteristic of the patients is summarized in the table.
All 4 patients were successfully treated, one with high doses of glucocorticosteroids (GC), two with combination GC plus CyA. The last and most severe one had MAS refractory to the combination GC + CyA and must have been added biological therapy (tocilizumab). We reviewed also another cases of MAS treated with biologics which have been published.
Conclusions: Our cases illustrate that MAS may develop also in adult patient with various rheumatic diseases (JIA, AOSD, RA) despite the low activity or remission. It occurs particularly in younger subjects. As the MAS symptoms may overlap with the symptoms of the primary disease (JIA, AODS) the diagnosis may be difficult. MAS must be suspected in inflammatory rheumatic diseases patients with sudden increase of CRP, extreme increase of ferritin, liver function tests and decrease of platelets. An immediate treatment with GC, CyA and etoposide is essential; biologicals (anakinra, canakinumab or tocilizumab) may be benefitial in refractory cases.
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THU0566 CLINICAL AND GENETIC PHENOTYPES OF CHINESE PATIENTS WITH ADULT AUTOINFLAMMATORY DISEASES: REPORT FROM AN ADULT REFERENCE CENTER

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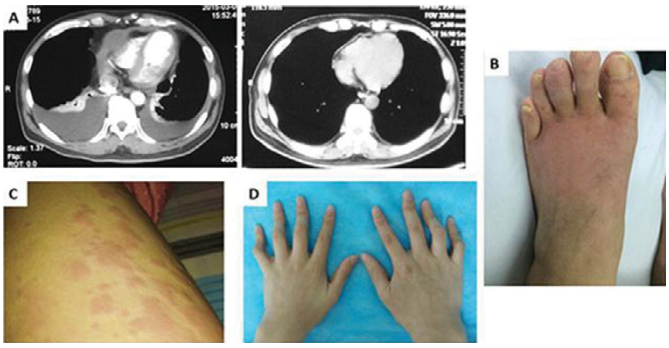
Background: Autoinflammatory diseases (AUID) is a group of disorders characterized by dysfunction of innate immunity which caused by gene mutations leading to coded proteins changes, finally causing uncontrolled systemic inflammation. AUID are usually diagnosed during pediatric age. However, adult-onset disease or diagnosis during adulthood has been occasionally described. Moreover, AUID have been hardly reported in the Chinese population.
Objectives: We aimed to characterize the clinical and genetic phenotypes of Chinese adult patients with AUID.
Methods: We prospectively evaluated clinical and genetic features of adult patients (≥16 years) suspected monogenic AUID in the period April 2015 to May 2016, at the adult AUID center, Department of Rheumatology, Peking Union Medical College Hospital. The definite diagnosis of each disease was deemed to be present if both clinical phenotypes and genetic confirmation were met.
Results: During the study period, a total of 37 adult patients with clinical phenotypes suspicious of monogenic AUID requested for a genetic study. A final diagnosis of monogenic AUID was achieved in 16 patients (43.2% of patients tested). Two additional patients were diagnosed with periodic fever, aphthous stomatitis, pharyngitis and adenitis (PFAPA) syndrome. Finally, a total of 18 patients with AUID were diagnosed and follow-up in our center, including 7 (38.9%) familial Mediterranean fever (FMF), 2 (11.1%) tumor necrosis factor-receptor associated periodic syndrome (TRAPS), 3 (16.7%) cryopyrin-associated periodic syndrome (CAPS), 3 (16.7%) NLRP12-autoinflammtory disease (NLRP12-AD), 1 (5.6%) Blau syndrome (BS), and 2 (11.1%) PFAPA. Disease onset during adulthood was observed in 15 (83.3%) patients, and the final diagnosis was delayed with a mean time of 10 years. Adult AUID patients usually carried low-penetrance mutations and gene variants were presented as heterozygosis or compound heterozygosis.



Conclusions: Adult AUID is not uncommon. FMF, CAPS, and NLRP12-AD are relatively common monogenic AUID in Chinese adult patients. Adult-onset AUID may be related to the presence of low-penetrance mutations, being characterized by nonspecific, incomplete or atypical disease patterns, leading to a delay of diagnosis. The interpretation of gene analysis in adult suspected AUID should be performed with caution, and if possible, should be referred to expert physicians in the field in adult AUID center.
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THU0567 RAPID IMPROVEMENT WITH TOCILIZUMAB IN REFRACTORY AND SEVERE UVEITIC CYSTOID MACULAR EDEMA

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Background: In uveitis, remission-inducing therapy with even more vigor than does rheumatology is mandatory. Since the eye is so much less forgiving of chronic inflammation than is the joint, with profound life-altering consequences. Cystoid macular edema (CME) is the leading cause of blindness in uveitis.
Objectives: To evaluate the rapid efficacy of Tocilizumab (TCZ) in refractory CME.
Methods: Multicentre study of 25 patients with CME due to non-infectious uveitis who had inadequate response to traditional treatment with corticosteroids and at least one conventional immunosuppressive drug including in most cases biological therapy (n=22). CME was defined as OCT >300 μm.
The outcome variables were the degree of inflammation, visual acuity, macular thickness. The results are expressed as mean±SD for normally distributed variables, or as median [IQR] when are not. Comparison of continuous variables was performed using the Wilcoxon test.
Results: 25 patients (17 women/8 men), mean age 33.6±18.9 years were studied. The associated diseases were: juvenile idiopathic arthritis (9), Behçet's (7), Birdshot (4), idiopathic (4), sarcoidosis (1). The ocular pattern was: panuveitis (9), anterior uveitis (7), posterior uveitis (5) and intermediate uveitis (4). Most patients had bilateral involvement (24). Prior to TCZ they received: intraocular corticosteroids (22), iv. methylprednisolone (7), methotrexate (MTX) (19), cyclosporine A (CSA) (17), mycophenolate (4), azathioprine (2), leflunomide (2), cyclophosphamide (1), sulfasalazine (1), acetazolamide (1) and thalidomide (1). The biological used before TCZ were infliximab (8), adalimumab (19),

Abstract THU0565 – Table 1

Patient	Age (years)	Primary disease			Clinical manifestations of MAS	Treatment
		Dg.	Duration	Treatment prior to MAS		
L.H., female	23	JIA	11 years	MTX	hepatosplenomegaly, increase of ALT, AST, pancytopenia, serositis	GC high doses (i.v. pulses), cyclosporine
P.V., male	20	RA	2 years	MTX, SAS	fever, pancytopenia, hepatosplenomegaly, increase of ALT, AST, pericarditis	GC high doses (oral), cyclosporine
P.D., male	32	AODS	3 years	MTX	fever, hepatosplenomegaly, increase of ALT, AST, pancytopenia,	GC high doses (oral)
V.N., female	33	AODS	9 months	MP, AZA	fever, pancytopenia, hepatosplenomegaly, increase of ALT, AST, alveolar hemorrhage	GC high doses (i.v. pulses), cyclosporine, tocilizumab