

## Safety of mycophenolate mofetil in Behçet's syndrome: a single centre retrospective study

Sirs,

Although there are many agents used in the treatment of Behçet's syndrome (BS), there are problems including adverse effects of azathioprine (AZA) in the presence of tiopurine methyl transferase enzyme deficiency, unacceptable toxicity of cyclophosphamide, high cost and tuberculosis risk of infliximab (IFX) and the limited access to interferon- $\alpha$  in recent years (1-4). Therefore, alternative treatment options are clearly needed. Among those alternatives, mycophenolate mofetil (MMF) is a promising immunosuppressive agent with acceptable safety profile and has been reported to be effective in the maintenance treatment of severe BD such as uveitis attacks and neurologic involvement (5-9).

This single-centre, retrospective study aims to investigate the safety profile in patients with BS using MMF. Among 425 patients fulfilling International Study Group (ISG) criteria for BS and being followed up by Ege University Rheumatology outpatient clinic between 2006 and 2023, the data of 52 patients (M/F: 33/19) receiving MMF treatment were evaluated. These patients included those who were switched to MMF because of AZA adverse effects, intolerance, long term use and drug interactions with warfarine.

The mean age and disease duration were 45.06 $\pm$ 9.47 years and 16.58 $\pm$ 7.68 years, respectively. While 11 patients were still smoking, the others were not. Disease involvement types of the patients are shown in Table I. Besides MMF 2 gr/day, all patients were receiving colchicine, and 7 patients were receiving an anti-TNF agent (six adalimumab and one IFX). The mean duration of MMF usage was 44.94 $\pm$ 8.52 months. The patients' mean baseline Behçet's Disease Current Activity Form (BDCAF) and Behçet Syndrome Activity Scale (BSAS) scores were 1.59 $\pm$ 1.20 and 12.88 $\pm$ 8.28, respectively. The mean baseline Behçet's Syndrome Overall Damage Index (BODI) score of the patients was 3.27 $\pm$ 1.20.

Adverse effects were observed only in 5 patients, including bacterial pneumonia and reversible cytopenia (Table I). Liver or renal toxicity was not observed in any patient. No tuberculosis or fungal infection was observed. No mortality was observed in any patient. Comparison of patients with and

**Table I.** Behçet's syndrome involvement types and the reasons of MMF withdrawal and details of adverse effects.

	n		n
<b>Involvement</b>		<b>Drug withdrawal</b>	
Oral aphthous ulcer	46	Remission	3
Genital ulcer	34	Pregnancy	1
ENL	8	Flare-up	2
Acneiform lesion	20	<b>Adverse effects</b>	
Panuveitis	20	Headache	1
Retinal vasculitis	2	Nausea	1
Vascular	20	Fatigue	1
DVT	13	Dizziness	1
Thrombophlebitis	7	GI intolerance	1
Arthritis	7	<b>Bacterial infection</b>	
CNS-P	3	Pneumonia	1
CNS-NONP	4	<b>Cytopenia</b>	
GI	3	Leukopenia	1

ENL: erythema nodosum-like lesion; DVT: deep vein thrombosis; CNS-P: central nervous system parenchyma involvement; CNS-NONP: central nervous system non-parenchyma involvement; GI: gastrointestinal involvement; n: number of patients.

without adverse effects showed that adverse effects occurred more frequently in those with a shorter disease duration ( $p=0.054$ ) and younger age ( $p=0.134$ ), but without significance. There was also no significant difference in terms of gender ( $p=0.260$ ).

During follow-up, MMF was discontinued in 6 patients: due to remission in three, because of pregnancy in one, and due to disease flare up in two (pulmonary artery vasculitis and thrombophlebitis).

In conclusion, based upon our data, MMF seems to be a relatively safe treatment option in BD. MMF may be an alternative option when other immunosuppressive agents cannot be used for various reasons. Randomised controlled studies with a higher number of patients are obviously needed to demonstrate the safety and efficacy data of MMF in the treatment of BD.

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## References

1. SAADOUN D, WECHSLER B, TERRADA C *et al.*: Azathioprine in severe uveitis of Behçet's disease. *Arthritis Care Res* 2010; 62(12): 1733-38. <https://doi.org/10.1002/acr.20308>
2. HATEMI G, CHRISTENSEN R, BANG D *et al.*: 2018 update of the EULAR recommendations for the management of Behçet's syndrome. *Ann Rheum Dis* 2018; 77(6): 808-18. <https://doi.org/10.1136/annrheumdis-2018-213225>
3. OZGULER Y, LECCSE P, CHRISTENSEN R *et al.*: Management of major organ involvement of Behçet's syndrome: a systematic review for update of the EULAR recommendations. *Rheumatology* 2018; 57(12): 2200-12. <https://doi.org/10.1093/rheumatology/key242>
4. GUZELANT G, UCAR D, ESATOGLU SN *et al.*: Infliximab for uveitis of Behçet's syndrome: a trend for earlier initiation. *Clin Exp Rheumatol* 2017; 35 (Suppl.108): S86-89.
5. SHUGAIV E, TUZUN E, MUTLU M, KIYAT-ATAMER A, KURTUNCU M, AKMAN-DEMIR G: Mycophenolate mofetil as a novel immunosuppressant in the treatment of neuro-Behçet's disease with parenchymal involvement: presentation of four cases. *Clin Exp Rheumatol* 2011; 29 (Suppl. 67): S64-67.
6. TERASHITA S, TANAKA T, TANEICHI H, ADACHI Y, MORI M: Mycophenolate mofetil and prednisolone for cerebral sinus venous thrombosis with Behçet's disease. *Pediatr Int* 2019; 61(9): 920-22. <https://doi.org/10.1111/ped.13943>
7. KAPPEN JH, MENSINK PB, LESTERHUIS W *et al.*: Mycophenolate sodium: effective treatment for therapy-refractory intestinal Behçet's disease, evaluated with enteroscopy. *Am J Gastroenterol* 2008; 103(12): 3213-14. [https://doi.org/10.1111/j.1572-0241.2008.02161\\_13.x](https://doi.org/10.1111/j.1572-0241.2008.02161_13.x)
8. ADLER YD, MANSMANN U, ZOUBOULIS CC: Mycophenolate mofetil is ineffective in the treatment of mucocutaneous Adamantiades-Behçet's disease. *Dermatology* 2001; 203(4): 322-24. <https://doi.org/10.1159/000051781>
9. KOSE O, SIMSEK I, PAY S: Mycophenolate sodium in the treatment of mucocutaneous Behçet's diseases. *Int J Dermatol* 2011; 50(7): 895-96. <https://doi.org/10.1111/j.1365-4632.2010.04505.x>