AB0361

EFFECTIVENESS AND SAFETY OF INFLIXIMAB DOSE ESCALATION IN PATIENTS WITH REFRACTORY TAKAYASU ARTERITIS: A REAL-LIFE EXPERIENCE FROM A MONOCENTRIC COHORT

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Background: Most published evidence on infliximab (IFX) in Takayasu arteritis (TAK) refers to its use at the standard dose of 5mg/kg every 6-8 weeks¹. However, in other diseases such as rheumatoid arthritis or Crohn's disease^{2,3}, it has been already demonstrated that IFX often requires a dose escalation to maintain its response.

Objectives: To evaluate effectiveness and safety of IFX dose escalation in TAK patients. To identify predictors of refractoriness to standard-dose IFX.

Methods: Medical records of IFX-treated TAK patients from a large single-centre observational cohort were reviewed. Decisions on IFX start, interruption, and dose modification were always made by the same experienced physician (EB). IFX therapy duration and reasons for dose escalation and therapy suspension were evaluated. Occurrence of adverse events was recorded. A comparison between patients who maintained IFX standard-dose and those who needed dose-escalation was performed. Factors predicting standard-dose refractoriness were analyzed.

Results: Forty-one patients were included (38 women; median age at IFX start, 36 [IQR, 28-45] years; median disease duration, 22 [13-60] months). Starting IFX dose was 5mg/kg 6-weekly; 39 patients (95%) were on concomitant csDMARD and 38 patients (93%) on systemic glucocorticoids (GC). IFX dose escalation was performed in the majority of patients (n=28, 68%) (Figure 1). Persistence/recurrence of clinical symptoms was the most frequent reason for dose escalation (62%). Median IFX therapy duration was 39 (26-61) months in the standard-dose and 68 (38-87) months in the intensified-dose group. Patients in the intensified-dose group had a higher number of relapses (3.4 vs 0.8 events/patient), expression of a more aggressive disease phenotype. Nevertheless, in only 8 patients (29%) from this group IFX was suspended, after a median of 38 (31-71) months. Causes of suspension were loss of response (n=7) or patient's request (n=1). GC were successfully suspended in 4 patients from the standard-dose (36%) and 3 patients from intensified-dose (11%) group. Median daily prednisone dose was reduced from 10 (6-10) to 3 (0-5) mg in the standard-dose group, and from 13 (9-18) to 5 (4-5) mg in the intensified-dose group. Three patients from the intensified-dose group had a serious infection; one patient from the standard-dose group developed paradoxical psoriasis. At univariate analysis, younger age at diagnosis and at IFX start were associated with IFX escalation (Table 1).

Figure 1. Infliximab dose escalation regimens (the cross (x) indicates treatment suspension)

Table 1. Factors influencing IFX dose escalation in patients with TAK (Cox proportional hazards model)

	Standard-dose IFX	Intensified-dose IFX	P-value
Age at diagnosis, years	40 (34-46)	30 (23-40)	0.031
Diagnostic delay, months	12 (7-77)	27 (15-50)	0.73
Age at IFX start, years	42 (38-61)	34 (27-44)	0.040
Delay before IFX start, months	33 (14-90)	24 (11-53)	0.48
Daily PDN at IFX start, mg	8.75 (5-10)	11.25 (8.5-16.25)	0.051
CRP at IFX start, mg/L	6.5 (2.1-9.3)	10.7 (5.2-20.9)	0.07
Class V Numano, n (%)	3 (30)	16 (57)	0.133
PETVAS score	8 (6-12)	12 (9-16)	0.056

Conclusion: In TAK, dose escalation can be a safe strategy to optimize IFX durability in refractory patients. Younger patients seem to be more refractory to standard dosages.

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AB0362

DEMOGRAPHIC AND CLINICAL CHARACTERISTICS OF BEHCET'S DISEASE PATIENTS

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Background: Behcet's Disease (BD) is a systemic variable vessel vasculitis that involves the skin, mucosa, joints, eyes, arteries, veins, nervous system and the gastrointestinal system.

Objectives: In this study we aimed to present variety of involvements in patients who were followed up in our outpatient clinic with a diagnosis of BD.

Methods: Data of 394 patients diagnosed with BD between 2000-2020 were retrospectively reviewed clinical, demographic characteristics and systemic involvements.

Results: In our study 43.7% of BD patients were female, 56.3% were male and the mean age was 40±11years, disease average age of onset 36.5±10.6, disease duration was 12.8±6.8years. It was observed mucocutaneous involvement 98% of the patients, uveitis in 35%, retinal vasculitis in 2.8%, arthritis in 24.9%, arterial occlusion in 2.3%, arterial aneurysm in 3.8%, venous involvement in 19.8%, gastrointestinal (GIS) involvement in 4.3%, cardiac involvement in 1.5%, and cranial involvement 7.1 (Table 1).

Table 1. The Data of Behçet Disease

n (%)	n= 394
Gender	
Female	172 (43.7)
Male	222 (56.3)
Family History	48 (12.2)
Fever & Weight Loss	21 (5.3)
Mucocutaneous involvement	386 (98)
Oral Aphthous Ulcer	379 (96.2)
Genital Ulcer	256 (65)
Papulopustular lesions	129 (32.7)
Erythema Nodosum-like lesions	150 (38.1)
Skin Pathergy Reaction	185 (47)
Uveitis	138 (35)
Retinal Vasculitis	11 (2.8)
Venous involvement	76 (17.6)
Thrombophlebitis	30 (7.6)
	67 (17)
Deep venous thrombosis	
Arthritis	98 (24.9)
Monoarthritis	74 (75.5)
Oligoarthritis	21 (21.4)
Sacroiliitis	3 (3.0)
Artery Occlusion	9 (2.3)
Arterial Aneurysm	15 (3.8)
GIS involvement	17 (4.3)
Ileum	9 (2.3)
Colon	2 (0.5)
Rectum	1 (0.3)
Ileocolonic	4 (1)
Cardiac involvement	6 (1.5)
Pericarditis	2 (0.5)
Ventricular thrombosis	3 (0.7)
Atrial thrombosis	1 (0.2)
Cranial involvement	24 (5.6)
Parenchymal involvement	13 (4.6)
Cerebral Venous Thrombosis	11 (2.8)
Pulse steroid	15 (3.8)
1mg/kg steroid	48 (12.2)
Infliximab	13 (3.3)
Azathioprine	184 (46.7)
Cyclophosphamide	31 (7.9)

When all patients evaluated in terms of renal findings, proteinuria was observed in 5 patients and hematuria was observed in 2 patients. 3 patients had proteinuria over than 500mg/day. Their renal biopsy findings; 2 of them were nonspecific involvements and one of them was minimal mesangioproliferative changes.

Conclusion: As a multi-system disease, general data have been presented, as clinical symptoms involve almost all systems of the body (1).

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AB0363

PERIOPERATIVE MANAGEMENT WITH BIOLOGICS ON SEVERE AORTIC VALVE REGURGITATION CAUSED BY BEHÇET'S SYNDROME: THE EXPERIENCE FROM A SINGLE CENTER

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Background: Cardiovascular involvement in Behçet's syndrome (BS) is associated with poor prognosis and accounts for the leading cause of mortality and morbidity in BS^{1,2}. Perioperative management of severe aortic valve regurgitation (AR) caused by BS is critical while challenging. AR caused by BS is associated with a high incidence of severe postoperative complications, especially paravalvular leakage (PVL) due to the fragilities of aortic lesions and tissue inflammation, leading to a significantly increased risk of re-operation and life-threatening conditions³⁻⁵. For the perioperative management of patients with AR caused by BS, many patients respond inadequately to the combination therapies of glucocorticoids (GCs) and immunosuppressants. Meanwhile, rapid and efficient control of inflammation is critical in preserving cardiac function and surgical management. However, the application of biologics in the perioperative treatment of AR attributable to BS has not yet been evaluated.

Objectives: To investigate the efficacy and safety of biologics in the perioperative management of severe AR caused by BS.

Methods: We retrospectively analyzed twenty patients with severe AR caused by BS and were treated with biologics during the perioperative cardiac surgeries in our center between February 2016 and October 2020.

Results: Twenty patients with severe AR were enrolled, including 19 males and 1 female, with a mean age of 39.1±8.8 years and median course 8 (IQR, 5.25-10) years. Before biologics administration, 92.9% of the patients who underwent aortic valve replacement surgeries had failed conventional therapy and developed postoperative paravalvular leakage (PVL) at a median interval of 4 months. Biologics was administered during the perioperative period of 22 aortic valve surgeries, including preoperatively with a median interval of 3.5 (IQR, 2.75-4.25) months in 13 cases, or within three-month postoperatively in 9 cases, with background glucocorticoids (GCs) and immunosuppressants. After a median follow-up of 21 (IQR, 15-32) months, 11 out of 13 cases (84.6%) preoperatively and 8 out of 9 cases (88.9%) postoperatively treated with biologics were event-free. The BDCAF score improved significantly (7 vs. 0, median, p<0.0001). Significant decrease of ESR (25.0 (IQR, 11-36.25) mm/h vs. 6.5 (IQR, 4-8.8) mm/h, p<0.001), and CRP (20.77 (IQR, 7.19-29.58) mg/L vs. 1.53 (IQR, 0.94-2.92) mg/L, p=0.001) were achieved rapidly and effectively. The dosage of GCs tapered from 40 (IQR, 30-60) mg/d to 10 (IQR, 5-11.25) mg/d, p<0.0001. Immunosuppressants were tapered in number and dosage in 6 (30%) and 20 patients (100%), respectively. No serious adverse event was observed.

Conclusion: Our study suggests that biologics was effective and well-tolerated for the perioperative management of severe and refractory AR caused by BS, which significantly reduced the occurrence of postoperative PVL and had a favorable GCs- and immunosuppressants- sparing effect.

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AB0364

DO PATIENTS PARTICIPATING IN MEETINGS REPRESENT THE ACTUAL PATIENT POPULATION IN BEHÇET SYNDROME?

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Background: The importance of patient involvement in healthcare research is increasingly emphasized. Patients participate as research partners in designing studies and development of management recommendations, measurement tools and outcome measures. However, ensuring representation of the general patient population by specific patient groups may be challenging for multisystem diseases with heterogenous phenotype.

Objectives: We aimed to evaluate whether patients with Behcet syndrome (BS) participating in a patient convention represent the actual patient population attending the clinic.

Methods: A questionnaire was applied to 104 BS patients (Meeting group) attending the patient convention which was held during the Cerrahpasa Behcet Disease Symposium in Istanbul in February 2020. Patients had been invited to the convention through posters, advertisement on our website and social media. The questionnaire was conducted with a keypad given to the patients and it consisted of 21 items including age, gender, education level, working status, disease duration, BS manifestations, and treatment. The same questionnaire was filled by 97 consecutive patients (Clinic group) who attended our rheumatology outpatient clinic for their routine controls. Chi-square test was used to compare the groups.

Results: Table 1 shows demographic and disease characteristics of the patient groups. The groups were similar in terms of sex and education level. There were more men in both groups, probably reflecting the more severe disease course among men in BS. There were significantly more patients who were >40 years of age and had a disease duration more than 20 years in the Meeting group. Although there were more patients who had a job in Clinic group, the difference was not significant. Central nervous system involvement, vascular involvement, genital ulcers, erythema nodosum, and arthritis were significantly more common in patients in the Meeting group compared with those in the Clinic group. The frequency of eye involvement, gastrointestinal involvement and papulopustular lesions were similar in the two groups. Cyclophosphamide use was significantly more common in Meeting group compared to the Clinic group.

Table 1. Demographics, clinical characteristics, and treatments

	Meeting Group (n=104) (n/N, %)	Clinic Group (n=97) (n, %)	P
Oral aphthous ulcers	88/97(91)	94(97)	0.13
Genital ulcers	86/104(83)	68(70)	0.045
Erythema nodosum	77/103(75)	47(48)	0.0003
Papulopustular skin lesions	69/103(67)	75(77)	0.09
Arthritis	78/102(77)	46(47)	<0.0001
Eye involvement	51/103(50)	53(55)	0.48
Vascular involvement	42/98(43)	25(26)	0.036
CNS involvement	14/103(14)	2(2)	0.016
GI involvement	14/97(14)	6(6)	0.10
Prednisolone - still using	30/104(29)	34(35)	0.37
Prednisolone - ever used	88/104 (85)	72(74)	0.08
Colchicine - still using	43/100 (43)	46(47)	0.57
Colchicine - ever used	86/100(86)	74(76)	0.10
AZA - still using	45/100 (45)	41(42)	0.77
AZA - ever used	81/100 (81)	74(76)	0.49
CYC - still using	1/96(1)	0(0)	NS
CYC - ever used	16/96(17)	7(7)	0.048
bDMARDs - still using	20/101(20)	26(27)	0.31
bDMARDs - ever used	28/101(28)	32(33)	0.44

* Adjusted P-values by Bonferroni correction were <0.001.BS: Behcet Syndrome, CNS: Central nervous system, GI: Gastrointestinal, AZA: Azathioprine, CYC: Cyclophosphamide; bDMARDs: Biologic disease-modifying anti-rheumatic drugs; NS: non-significant

Conclusion: Patients in the Meeting group had more severe disease compared to the Clinic group. Patients with all types of involvement were adequately represented in the Meeting group.

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