

The characteristics of a northern Israeli cohort of patients with Behcet's syndrome: a collaboration of two centers

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Background

Behcet's syndrome (BS) is believed to prevalent among Muslims and Druze in Israel. Since the studies by Kraus 15 years ago, very few studies describing the characteristics of BS among Israeli patients have been published.

Aim

To describe the baseline characteristics of our patients with BS, and compare demographic and clinical features between Jewish and Arab subpopulations.

Methods

Electronic medical records were reviewed, and demographic, clinical, laboratory and medications' prescription data were extracted for each patient. Jewish and Arabic subpopulations were compared.

Results

The cohort included 86 patients. Males constituted 43 (50%), mean age at the time of diagnosis was 29.9 years old (range of 6-64). Sixty one (70.9%) were Arab. Oral and genital ulcers were evident in 82 (95.3%) and 47 (54.7%) patients, respectively. Skin, joints, eye, GI tract, neurologic and vascular systems were demonstrated among 35 (40.7%), 51 (59.3%), 41 (47.7%), 6 (7%), 7 (8.1%), 12 (14%), respectively (Table 1). HLA B51 was performed in 32 (37.2%) patients and was positive in 20 (66.7%). Pathergy test was performed in 9 (10.5%) patients and was positive in 6 (66.7%). Colchicine was used in 72 (82.5%) cases, azathioprine 42 (48.9%), methotrexate 15 (17.4%), apremilast 7 (8.1%), cyclosporine-A 7 (8.1%), adalimumab 23 (26.7%), infliximab 10 (14.6%), cyclophosphamide 1 (1.2%), tocilizumab 2 (2.3%) and anti-coagulation 3 (3.5%) (Table 2). The Arab and Jewish subpopulations were significantly different with regard to male (or female), 35 (57.4%) vs 8 (32%), $p=0.033$ (Table 3).

Table 1 – Study Population

Category	Subcategory	N (%)	
Demographics	Males	43 (50%)	
	Mean age at diagnosis	29.9 (6-64)	
	Ethnicity		
	Jewish	25 (29.1%)	
	Muslim	39 (45.3%)	
	Druze	18 (20.9%)	
Christian	4 (4.7%)		
Ulcers	Oral ulcers	82 (95.3%)	
	Genital Ulcers	47 (54.7%)	
Skin involvement	Acne	6	
	Erythema Nodosum	7	
	Folliculitis	20	
	Erysipelas like erythema	1	
	Other	3	
Eye involvement	Anterior uveitis	3	
	Intermediate uveitis	3	
	Posterior uveitis	1	
	Panuveitis	14	
	Uveitis not specified	15	
	Neuroretinitis	2	
	CRVO	2	
CRAO	1		
Joint involvement	Papillary edema	1	
	Macular edema	1	
	Blindness	3	
	Arthralgia	35	
Arthritis	Arthritis	10	
	Inflammatory back pain	2	
	Sacroiliitis	3	
	Hip AVN	1	
	Vascular involvement	Deep venous thrombosis	7
Pulmonary artery thrombosis		3	
CSVT		2	
Budd Chiari		1	
PVT		1	
Pulmonary artery aneurysm		1	
Sinus vein thrombosis		1	
VOD		1	
Cardiac involvement	LAD Thrombus	1	
	LV ICT	1	
	RV ICT	1	
	Pericarditis	1	
Pulm. Hemorrhage	Pulm. Hemorrhage	1	
	Neurologic invol.	PTC	2
		CVA/TIA	3
		Encephalitis	1
SN hearing loss		1	
GI	Crohn disease	3	
	Ulcerative colitis	3	
	TE aphthosis	1	
Pathergy test	Pathergy test	9 (10.5%)	
	Positive	6	
HLA B51	HLA B51	32 (37.2%)	
	Positive	20	

Table 2 – Treatment

Drug	N (%)
Colchicine	72 (82.5%)
Azathioprine	42 (48.9%)
Methotrexate	15 (17.4%)
Apremilast	7 (8.1%)
Cyclosporine	7 (8.1%)
Adalimumab	23 (26.7%)
Infliximab	10 (14.6%)
Cyclophosphamide	1 (1.2%)
Tocilizumab	2 (2.23%)
Anti-coagulation	3 (3.5%)

Table 3 – Jews vs. Arab Subpopulations

	Jews 25 (29.1%)	Arab (overall) 61 (70.9%)	p-value
Males (vs females)	8 (32%)	35 (57.4%)	0.03
Smoking	7 (28%)	12 (19.7%)	0.56
Oral ulcers	24 (96%)	58 (95.1%)	0.85
Genital ulcers	12 (48%)	35 (57.4%)	0.43
Skin involvement	11 (44%)	23 (37.7%)	0.59
Eye involvement	8 (32%)	30 (49.2%)	0.15
Musculoskeletal	17 (56%)	37 (60.7%)	0.69
Pathergy test	1/1 (100%)	5/8 (62.5%)	0.40
Vascular involvement	3 (12%)	8 (13.1%)	0.60
Neurologic involvement	1 (4%)	5 (8.2%)	0.43
GI involvement	2 (8%)	3 (4.9%)	0.46
HLA B51 positivity	3 (60%)	17 (62.9%)	0.76

Conclusions

BS is more common among Arabs compared to Jews in northern Israel, especially among Druze and Muslims, but no significant clinical or demographic differences were found except for higher proportion of male patients among Arabs.