

indicates a higher risk of depression or anxiety. The receiver operating characteristic (ROC) curve of both RAID-D (Fig. 1A) and RAID-A (Fig. 1B) performed better than the original RAID in discriminating between patients with or without depression and anxiety.

Our study revealed that RAID was strongly associated with HADS. The new RAID-D and RAID-A further increased the accuracy in detecting patients with depression and anxiety. The same RAID questionnaire can be used to identify patients with a high risk of depression and anxiety with adjustment of the weight of each domain, which can readily be computerized and obtained easily in clinical practice. This can maximize the utilization of RAID questionnaire, while reducing the time burden of clinicians and patients. We suggested using RAID-D and RAID-A as a screening tool for depression and anxiety among RA patients.

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Disclosure of interest

The authors declare that they have no competing interest.

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Appendix A. Supplementary data

Supplementary material related to this article can be found, in the online version, at <https://doi.org/10.1016/j.jbspin.2019.04.007>.

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Khai-Jing Ng^a
Kuang-Yung Huang^{a,b}
Chien-Hsueh Tung^{a,b}
Bao-Bao Hsu^a
Cheng-Han Wu^a
Malcolm Koo^{c,d}
Chia-Wen Hsu^e
Ming-Chi Lu^{a,b,*}
Ning-Sheng Lai^{a,b,*}

^a Division of Allergy, Immunology and Rheumatology, Dalin Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Chiayi, Taiwan

^b School of Medicine, Tzu Chi University, Hualien, Taiwan

^c Graduate Institute of Long-term Care, Tzu Chi University of Science and Technology, Hualien, Taiwan

^d Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada

^e Department of Medical Research, Dalin Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation, Chiayi, Taiwan

* Corresponding authors at: Division of Allergy, Immunology, and Rheumatology Dalin Tzu Chi Hospital, Buddhist Tzu Chi Medical Foundation No. 2, Minsheng Road, Dalin, Chiayi, Taiwan. E-mail addresses: e360187@yahoo.com.tw (M.-C. Lu), tzuchilai@gmail.com (N.-S. Lai)

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HLA-B*51 subtypes molecular analysis in a series of Italian patients with Behçet's syndrome



We analysed the subtypes of the Human Leukocyte Antigen (HLA)-B*51 in a large series of patients with Behçet's syndrome (BS) and healthy controls (HC) living in Southern Italy. HLA-B*51 is the predominant BS susceptibility locus in several populations [1–5].

HLA-B*51 subtypes genotyping was performed enrolling 152 consecutive BS patients seen at the outpatient clinic of Rheumatology Department of Lucania diagnosed according to ISG criteria [6], and 320 ethnically-matched bone marrow donors unrelated to each other or to BS patients. All subjects gave their informed consent. DNA was prepared from blood leukocytes by standard methods. Genotyping for 63 alleles (B*51:01-B*5163) was performed by the PCR-SSP method. PCR was carried out with a GeneAmp PCR System 9700 (Applied Biosystems, Foster City, CA) using the primer mixes included in the Kit for SSP-subtyping.

The frequency of HLA-B*51 subtypes in BS patients compared with control group was reported in Table 1. HLA-B*51 frequency

Table 1
HLA-B*51 subtypes frequencies in Italian Behçet's syndrome patients compared with healthy controls.

	BS patients, n (%) n = 152	HC, n (%) n = 320	P-value	RR (95% CI)
B*51	98 (64.5%)	54 (16.9%)	<0.01	3.82 (2.92–5.01)
B*51:01	76 (50.0%)	49 (15.3%)	<0.01	2.78 (2.18–3.54)
B*51:02	2 (1.3%)	0 (0.0%)	<0.05	3.13 (2.75–3.58)
B*51:03	0 (0.0%)	0 (0.0%)	NS	
B*51:04	0 (0.0%)	0 (0.0%)	NS	
B*51:05	1 (0.7%)	0 (0.0%)	NS	
B*51:06	0 (0.0%)	0 (0.0%)	NS	
B*51:07	1 (0.7%)	1 (0.3%)	NS	
B*51:08	18 (11.8%)	3 (0.9%)	<0.01	2.88 (2.30–3.61)
B*51:09	0 (0.0%)	1 (0.3%)	NS	
B*51:10-63	0 (0.0%)	0 (0.0%)	NS	

BS: Behçet's syndrome; HC: healthy controls; n: number of subjects; NS: not significant; RR: relative risk; CI: confidence interval.

was 64.5% (98/152) in BS patients and 16.9% (54/320) in the control group. The difference was statistically significant ($P < 0.01$, RR 3.82, CI 2.92–5.01). Half of BS patients showed the B*51:01 subtype, while its percentage was equal to 15.3% in HC ($P < 0.01$, RR 2.78, CI 2.18–3.54). B*51:08 frequency was higher in BS group (11.8%) than in HC (0.9%) ($P < 0.01$, RR 2.88, CI 2.30–3.61). B*51:02 subtype was found in two BS patients (1.3%) and in none of the control group. The difference was statistically significant ($P < 0.05$, RR 3.13, CI 2.75–3.58). B*51:05 and B*51:07 were rare subtypes with the same distribution in the patients group (0.7%); in the control group the first subtype was absent, while the frequency of the second-one was 0.3%. All other HLA-B*51 subtypes were absent in both groups, except for B51*09, that was found in 1 of HC.

We found a higher frequency of HLA-B*51 in the patients group compared to HC. B*51:01 was the most common allele in our cohort, as reported in previous studies analysing the distribution of HLA-B*51 subtypes in Italy [7,8]. In our study, HLA-B*51 subtyping was performed on a larger number of BS patients and included a higher number of subtypes in comparison with these previous studies. We also confirmed the high frequency of B*51:08 subtype and found the association between B*51:02 and BS susceptibility, to be validated in functional studies investigating the association between HLA molecules and BS. The relationship between BS and HLA-B*51 subtypes was investigated in various ethnic groups and HLA-B*51:01 was identified as the major risk allele in different ethnic groups, such as Greek, Spanish, Saudi Arabian, Iranian, German, Turkish and Japanese patients, not in Israelian population. The differences in frequency distribution could be associated to the differences in sample size and mostly the variability among populations of various genetic ancestry [4,5]. Future studies will be performed to correlate the HLA-B*51 subtypes to the clinical phenotype.

Ethical approval

The corresponding author certifies that all authors approved all the submitted material and contributed to the study.

Disclosure of interest

The authors declare that they have no competing interest.

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Pietro Leccese^{a,*}

Maria Carmela Padula^a

Eustachio Vincenzo Santospirito^b

Rosa Colucci^b

Nancy Lascano^a

Salvatore D'Angelo^{a,c}

^a Rheumatology Institute of Lucania (IRel) and Rheumatology Department of Lucania, San Carlo Hospital of Potenza, Via Potito Petrone, Potenza, 85100 Italy

^b Tissue typing laboratory C.R.T. Basilicata, Madonna delle Grazie Hospital, Contrada Chiancalata, Matera, 75100 Italy

^c Basilicata Ricerca Biomedica (BRB) Foundation, via Verrastro, 9, Potenza, 85100 Italy

* Corresponding author at: Rheumatology Institute of Lucania (IRel) and Rheumatology Department of Lucania, San Carlo Hospital of Potenza, via Potito Petrone, 1, 85100, Potenza, Italy.
E-mail address: pietroleccese1979@gmail.com (P. Leccese)

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Importance of feelings of injustice in fibromyalgia, large internet survey on experiences of 4516 French patients



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Fibromyalgia (FM) has a major impact on everyday life [1]. Patients usually reports that FM is an unfair condition managed by sceptical physicians [2]. Indeed, higher levels of invalidation are reported in patients with FM than in those with more visible rheumatic conditions [3]. Perceived Injustice (PI) is defined as a combination of severity of loss, irreparability of loss, blame and sense of unfairness [4]. This feeling increases pain intensity, disability, painful behavior, fear of movement, catastrophizing, depression and decreases rates of return to work [5]. We conducted a cross-sectional internet survey evaluating French patients' FM impact and PI on quality of life as assessed by the Fibromyalgia Impact Questionnaire (FIQ) [6]. A 103-item auto-questionnaire