Serum level of proinflammatory cytokines such as IL-17 and IL-23 were measured by enzyme-linked immunosorbent assay (ELISA).

Results: Psychiatric manifestations

BD has significant lower score in all components of MAS and high prevalence of depression and anxiety in HDRS and HARS respectively compared with control group ($p < 0.001$). Severe depression was found in 82.9% of BD patients. Moreover, our data showed 46.7% of BD patients have moderate anxiety compared to the control group.

Serum Levels of IL-17 and IL-23

The serum level of IL-17 and IL-23 levels were significantly higher among BD patients than in healthy control (< 0.000).

There was no significant correlation between those cytokines and cognitive impairment, depression and anxiety.

Conclusion: Elevated level of IL-17 and IL-23 were observed in BD patients. However, our results do not support an association between serum IL-17 and IL-23 levels and cognitive dysfunction, depression and anxiety.

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AB0457

OBSTETRICAL OUTCOME AND TREATMENTS DURING PREGNANCY IN SERONEGATIVE PRIMARY APS: DATA FROM EUROPEAN RETROSPECTIVE STUDY

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Background:

Objectives: To compare clinical characteristics, pregnancies, and treatments during pregnancies of seronegative and seropositive APS, and analyse factors associated with adverse obstetrical outcomes.

Methods: Inclusion criteria were: (1) thrombotic arterial and/or venous; and/or obstetrical primary clinical APS (Sydney criteria); (2) absence of conventional antiphospholipid antibodies; (3) presence of at least one non-conventional APL among IgA ACL, IgA antiB2GPI, anti-vimentin G/M, anti-annexin V G/M, anti-PE G/M, anti-PS/PT G/M antibodies. The exclusion criteria were: (1) seropositive APS with conventional APS; (2) associated SLE or SLE like (SLE features and / or positive antinuclear autoantibodies); (3) other systemic connective tissue disease (Sjogren's syndrome, systemic sclerosis, myositis).

Results: 187 women (mean 33±5 years) with seronegative APS were included from 12 centers in the world and compared to 285 patients with seropositive APS. Seronegative APS have mostly obstetrical phenotypes rather than venous thrombosis in comparison to seropositive APS. The maternal and fetal outcomes and the rates of live births were not significantly different in seronegative and seropositive APS, except for higher rates of intrauterine deaths (15% vs 5%; $p=0.03$) and lower live birth term (36 ± 3 vs 38 ± 3 weeks of gestation; $p=0.04$) in the seropositive APS group. The cumulative incidence of adverse obstetrical events was significantly improved in treated seronegative APS vs untreated ones (log rank < 0.05), whereas there was no difference between patients who received aspirin or aspirin-LMWH combination.

Conclusion: Patients with clinical manifestations of APS without conventional APL should undergo testing for non-criteria APL. The diagnosis of seronegative APS could be important for a better care of these patients.

Table 1. Characteristics of seronegative and seropositive APS women.

	Seronegative APS N=187	Seropositive APS N=285
APS features		
Thrombotic APS		
Arterial APS (n;%)	0	105 (37)*
Venous APS (n;%)	9 (6)	154 (54)*
Obstetrical APS (n;%)	168 (89)	89 (31)*
Mix APS (n;%)	8 (4)	16 (6)
Non criteria features (n;%)	16 (9)	141 (49)*
Obstetrical history		
Miscarriages (n;%)	66 (35)	18 (6)*
Intrauterine deaths (n;%)	60 (32)	46 (16)*
Prematurity <34 wg (n;%)	43 (23)	31 (11)*

Table 2. Pregnancy outcome and treatment in seronegative and seropositive APS.

	Seronegative APS pregnancies N=108	Seropositive APS pregnancies N=75
Thrombotic APS		
Arterial APS (n;%)	0	20 (27)*
Venous APS (n;%)	8 (7)	42 (56)*
Obstetrical APS (n;%)	93 (86)	36 (48)*
Mix APS (n;%)	6 (6)	18 (24)
Aspirin (n;%) / Aspirin alone	95 (88) / 32 (30)	57 (76)* / 2 (3)*
LMWH isocoagulant amounts (n;%)	63 (58)	39 (52)
Aspirin-LMWH (n;%)	65 (60)	55 (73)
Preeclampsia/HELLP syndrome (n;%)	7 (7)	12 (16)*
IUGR (n;%)	5 (5)	7 (10)
Fetal loss (n;%)	33 (31)	22 (29)
Miscarriage / Intrauterine deaths	23 (21) / 5 (5)	11 (15) / 11 (15)*
Prematurity <34 weeks of gestation (n;%)	6 (6)	9 (12)
Term of fetal loss (weeks gestation)	10±8	13±7
Live births (n;%)	75 (69)	53 (70)
Term of live birth (weeks gestation)	38±3	36±3*

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AB0458

SYSTEMIC TREATMENT IN BEHÇET'S DISEASE ACCORDING TO CLINICAL PHENOTYPES. STUDY OF 111 PATIENTS

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Background: Behçet's disease (BD) is a multisystemic vasculitis. Different clinical phenotypes can be distinguished. Systemic corticosteroids are the most used drugs in BD. Conventional and biological immunosuppressants (IS) may also be used.

Objectives: To evaluate the systemic treatment of BD according to clinical domains.

Methods: Study of all consecutive 111 patients diagnosed with definitive or possible BD by expert rheumatologists in a well-defined population of Northern Spain, between 1980 and 2019. Most of them met the International Criteria for BD (ICBD) (1).

Results: We studied 111 patients (62 women/49 men), mean age at diagnosis 36.8±13.2 years. After a mean follow-up of 81.4±85 months, all patients required systemic treatment (TABLE 1-2). Biological therapy (n=28) was indicated by ocular manifestations (n=13; 46.4%) persistent, severe and refractory oral ulcers (n=10, 35.7%), neurological (n=2; 7.1%), musculoskeletal (n=2; 7.1%) or cutaneous involvement (1; 3.6%). Adalimumab and Infliximab were the biological therapy more frequently used.

Conclusion: Most patients with BD required oral corticosteroids and colchicine. Almost half required conventional IS. Up to a third required biologic therapy, especially by ocular involvement. Most patients had clinical improvement.

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AB0459 MORTALITY OF RHEUMATOID VASCULITIS AGGRAVATED BY CLINICALLY LATENT TUBERCULOSIS – A RETROSPECTIVE CLINICOPATHOLOGIC STUDY OF 161 AUTOPSY PATIENTS

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Background: Systemic vasculitis of autoimmune origin (e.g. rheumatoid vasculitis – RV) plays a pivotal role in the pathogenesis of rheumatoid arthritis (RA) [1]. RV may be characterized by *non-specific inflammation (nsRV)* with or without *fibrinoid necrosis (fnRV)* or by *granulomatous transformation of blood vessels (grRV)* [1].

The prevalence and mortality of tuberculosis (TB) is higher in rheumatoid arthritis (RA) than in the general population.

Objectives: The aim of this study was to assess the influence of dormant (inactive), clinically latent TB (with or without subclinical atypical miliary exacerbation) on the mortality of rheumatoid vasculitis (RV).

Methods: At the National Institute of Rheumatology 9475 patients died between 1969 and 1992; among them 161 with RA and all of them were autopsied [1].

RA was confirmed clinically according to the criteria of the ARA.

nsRV alone or in combination with fnRV or grRV was diagnosed at autopsy, and confirmed by a detailed review of extensive histological material [1].

The prevalence fibrous (fTB), fibrocasseous (fcTB) or miliary TB (mTB) was diagnosed and characterized histologically, reviewing retrospectively the clinical and pathological reports [1].

From each patient a total of 50-100 tissue blocks of 12 organs (heart, lung, liver, spleen, kidneys, pancreas, gastrointestinal tract, adrenal glands, skeletal muscle, peripheral nerve, skin and brain) were studied microscopically.

The possible role of fTB, fcTB or mTB on the mortality due to nsRV, fnRV or grRV was analyzed with Pearson's chi-squared (χ^2) test.

Results: nsRV complicated RA in 33 (20.49%) of 161 patients, in combination with fnRV in 17 (51.51 %) or with grRV in 10 (30.30 %) of 33 cases.

The nsRV led to death in 19 (57.57 %) of 33 patients, in combination with fnRV in 11 (64.71 % of 17) or with grRV in 7 (70.0 % of 10) cases; the mortality due to nsRV, fnRV or grRV showed an increasing tendency.

Post-primary TB was associated with RA in 21 (13.04%) of 161 patients, 12 (57.14% of 21) were fTB, and 9 (42.86% of 21) fcTB. One of 12 fTB and 5 of 9 fcTB were complicated with discrete miliary dissemination (mTB) in 6 (3.7% of 161; 28.57% of 21) RA patients.

TB (n=21) was associated with fatal nsRV in 5, with fnRV in 3, with grRV in 3 of 21 cases.

The fTB (n=12) was associated with fatal nsRV in 1, with fnRV in 1, with grTB in 1 of 12 cases.

The fcTB (n=9) was associated with fatal nsRV in 4, with fnRV in 3, with grTB in 3 of 9 cases.

mTB (n=6) was associated with fatal nsRV in 3, with fnRV in 2, with grTB in 3 of 6 cases.

There was a significant and positive correlation between fcTB and mortality of nsRV (c: 0.76, $\chi^2=9.7593$, $p<0.0017$), between fcTB and mortality of fnRV (c: 0.80, $\chi^2=6.5701$, $p<0.0103$), between fcTB and mortality of grRV (c: 0.90, $\chi^2=12.5835$, $p<0.00038$). The correlation was also positive and significant between mTB and mortality of nsRV (c: 0.79, $\chi^2=5.3406$, $p<0.0208$), between mTB and mortality of grRV (c: 0.95, $\chi^2=20.8706$, $p<0.0000049$).

The relationships were not significant between TB or fTB and mortality of nsRV, fnRV or grRV, nor between mTB and mortality of fnRV.

Conclusion: Recognition of indolent TB is a great challenge especially before starting immunosuppressive or biological therapy for RA.

TB may lead directly to death by erosion of pulmonary arteries with massive pulmonary bleeding, by hematogenous miliary dissemination (Landouzy typho-bacillosis) or by canalicular spread as a cavernous chronic process (phthisis tuberculosa), etc. Discrete miliary dissemination may be also lethal caused by circulatory failure [1].

The contribution of TB to the mortality of complications of RA or of allied disorders is plausible and can never be excluded.

According to our data the risk of mortality due to nsRV, fnRV or grRV showed an increasing tendency, and fnRV or grRV should be regarded the most severe forms of nsRV in RA.

The positive and significant correlation between fcTB or mTB and mortality of nsRV, fnRV or grRV represents a positive contribution to the fatal outcome due to nsRV, fnRV or grRV.

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AB0460 INTERLEUKIN-6 INHIBITION WITH TOCILIZUMAB FOR THE TREATMENT OF GIANT CELL ARTERITIS AND POLYMYALGIA RHEUMATICA IN PATIENTS WITH SERIOUS COMORBIDITIES

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TABLE.

CLÍNICAL PHENOTYPES	Cases N (%)	COLCH	COS	Dosis total IS	AZA	MTX	CYA	MMF	TLD	APR	DAP
Oral ulcers	110 (99.1)	85 (77.9)	81 (73.6)	51 (46.4)	30 (27.3)	25 (22.7)	14 (12.7)	2 (1.8)	6 (5.5)	6 (5.5)	3 (2.7)
Genital ulcers	69 (62.2)	56 (81.2)	51 (74)	32 (46.4)	17 (24.6)	16 (23.2)	10 (14.5)	1 (1.5)	5 (7.2)	2 (3.4)	3 (4.3)
Cutaneous lesions	76 (68.5)	58 (76.3)	61 (80.3)	52 (68.4)	32 (42.1)	22 (29)	9 (11.8)	0	5 (6.6)	6 (7.9)	3 (4)
Ocular manifestations	39 (35.1)	27 (69.2)	36 (92.3)	19 (48.7)	17 (43.6)	12 (30.8)	11 (28.2)	2 (5.1)	4 (10.3)	2 (5.1)	2 (5.1)
Neurological involvement	20 (18)	12 (60)	15 (75)	15 (75)	3 (15)	4 (20)	3 (15)	1 (5)	0	0	1 (5)
Vascular manifestations	11 (10)	8 (72.7)	9 (81.8)	5 (45.5)	3 (27.3)	3 (27.3)	1 (9.1)	0	0	0	0
Gastrointestinal involvement	4 (3.6)	2 (50)	1 (25)	1 (25)	1 (25)	0	0	0	0	0	0
TOTAL	111	85 (76.6)	85 (76.6)	51 (46)	30 (27)	25 (22.5)	14 (12.6)	2 (1.8)	6 (5.4)	6 (5.4)	3 (2.7)

TABLE 2.

CLINICAL PHENOTYPES	BT	ADA	IFX	ETN	TCZ	No improvement	Partial improvement	Complete response
Oral ulcers	28 (35.5)	22 (20)	12 (11)	3 (2.7)	2 (1.8)	22 (20)	22 (20)	66 (60)
Genital ulcers	17 (24.7)	13 (18.8)	8 (11.6)	2 (2.9)	1 (1.4)	16 (23.2)	12 (17.4)	41 (59.4)
Cutaneous lesions	21 (27.6)	18 (23.7)	8 (10.5)	3 (4)	2 (2.6)	8 (10.5)	19 (25)	49 (64.5)
Ocular manifestations	19 (50)	16 (42.1)	9 (23.7)	1 (2.6)	2 (5.3)	0	8(21)	30 (79)
Neurological involvement	7 (35)	2 (10)	4 (20)	1 (5)	0	3 (15)	5 (25)	12 (60)
Vascular manifestations	4 (36.4)	3 (27.3)	2 (18.2)	1 (9.1)	1 (9.1)	2 (18.2)	4(36.4)	5 (45.5)
Gastrointestinal involvement	0	0	0	0	0	1 (25)	2 (50)	2 (50)
TOTAL	28 (25.2)	22 (19.8)	12 (10.8)	3 (2.7)	2 (1.8)	22 (19.8)	22 (19.8)	67 (60.4)

Abbreviations: COLCH: Colchicine; OCS: Oral Corticosteroids; IS: Immunosuppressants; AZA: Azathioprine; MTX: Methotrexate; CYA: Cyclosporine A; MMF: Mycophenolate Mofetil; TLD: Talidomide; APR: Apremilast; DAP: Dapsone; BT: Biologic Therapy; ADA: Adalimumab; IFX: Infliximab; ETN: Etanercept; TCZ: Tocilizumab