Methods: 120 persons were examined: 90 patients with RA and 30 healthy people. All patients underwent a complete clinical and laboratory examination. Plasma NF-1 levels were determined using commercial test systems (RaiBio-tech, cat # EIA-NESF) according to the manufacturer's instructions. Patients with various forms of RA were comparable in age to the group of healthy individuals. Statistical processing of clinical examination data was carried out using the "STATISTICA 10.0 for Windows" software package. Quantitative data were processed statistically using the parametric Student's t-test, qualitative data using the non-parametric chi-square test. The significance of differences between groups was determined using analysis of variance. The results were considered statistically significant at $p < 0.05$.

Results: The average level of NF-1 in blood serum in healthy individuals was 31.79 ± 3.21 ng / ml ($M \pm \sigma$). The level of normal NF-1 values in healthy individuals, defined as $M \pm 2\sigma$, ranged from 25.3 to 37.83 ng / ml. There was no significant difference in the levels of circulating NF-1 and BMI in healthy individuals and patients with RA ($p > 0.05$). The inverse relationship of a lower level of NF-1 with an increase in BMI was not significant.

Group 1 (66 patients with RA) with increased serum NF-1 levels (> 37.83 ng / ml), and group 2 (44 patients) with normal values (< 37.83 ng / ml). A high level of NF-1 was characteristic for patients with high activity according to DAS28, RF seropositive, ACCP-positive, with extra-articular manifestations, who had been ill for 10 years or more. A reliable relationship between the level of NF-1 in the blood serum and laboratory parameters of RA activity - ESR, CRP, was shown, and secondary synovitis was more common. Our data show a direct correlation between the NF-1 level of the pro-inflammatory markers of RA.

Conclusion: The positive correlation between the level of NF-1 and classical markers of inflammation, such as CRP and ESR, confirms the involvement of NF-1 in the pathophysiology of inflammation in RA. This is also evidenced by the correlation of a high level of NF-1 in the blood serum with a more severe clinical picture of RA. It is known that NF-1 can promote the release of pro-inflammatory cytokines such as interleukin-8 (IL-8), interleukin-6 (IL-6), and macrophage inflammatory protein-1a (MIP-1a) in the chondrocytes of RA patients.

It is necessary to further study the role of NF-1 in the pathogenesis of systemic inflammatory reactions and the possibility of targeting pro-inflammatory cytokines, the possibility of regulating the level of NF-1 by drugs.

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AB0828 INFLUENCE OF SEASONAL VARIATIONS ON EMERGENCY RHEUMATOLOGY CONSULTATIONS

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Background: The influence of the seasons on the onset of diseases has been demonstrated in epidemiological studies, particularly in infectious pathologies. In rheumatology, recent studies have suggested the role of seasons in the disease activity of rheumatoid arthritis (1,2). However, no epidemiologic data exist on the influence of seasons in urgent rheumatology consultations, all causes combined.

Objectives: To study the influence of seasonal variations on urgent rheumatology consultations received in the Department of Rheumatology of the University Hospital of Ibn Rochd in Casablanca.

Methods: We conducted a retrospective study on the 2019 emergency consultations register of the Department of Rheumatology of the University Hospital of Ibn Rochd, Casablanca. The seasons were divided as follows: winter from December to February, spring from March to May, summer from June to August, and fall from September to November. The studied parameters were age, sex, reasons for consultation, affected joints, and diagnoses.

Results: 407 emergency consultations were carried out, with an average patient age of 50.7 years (range 14 - 88), and a sex ratio M/F of 0.4. The characteristics of the patients throughout the seasons is summed up in Table 1. The distribution of consultations by season was as follows: 29.5% in winter, 26.3% in spring, 25.4% in summer, and 18.8% in fall. The average age of the consultants depending on the season was homogeneous. The most frequent reasons for emergency consultation were respectively back pain (48.6%), polyarthralgia (23.1%), followed by arthritis (12.0%). Back pain slightly predominant in the cold seasons (fall, winter). Polyarthralgias had a winter peak. Arthritis presented a bimodal distribution in seasons of transition (spring, fall). The knees and lumbar spine were

the most frequently involved joints throughout the year, with no major differences between the seasons. The most frequent diagnoses over the year were degenerative (51%), inflammatory (8.6%), infectious (7.3%), metabolic (6.7%), and tumor (2.1%) pathologies, respectively. Osteoarthritis flares were less frequent in spring and summer. Inflammatory pathologies have not experienced a seasonal peak. Gout flares and infectious pathologies peaked in the spring. Finally, tumor pathologies peaked in the fall.

Conclusion: Seasonal variations seem to have an impact on the distribution of the reasons for consultation as well as the diagnoses made in the context of the rheumatologic emergencies. The cold seasons seemed to favor the onset of back pain and polyarthralgia, while the seasons of transition were conducive to the development of arthritis.

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Table 1. Characteristics of the patients throughout the seasons

	Winter n = 120 (29.5%)	Spring n = 107 (26.3%)	Summer n = 104 (25.4%)	Fall n = 76 (18.8%)	Total n = 407 (100%)
Age	51,2 (16 – 86)	51,6 (14 – 84)	51,3 (16 – 88)	48 (16 – 79)	50,7 (14 – 88)
Sex-ratio M/F	0,25	0,44	0,6	0,36	0,4
Reasons for consultation					
Arthritis (%)	8,3	15	11,5	14	12,0
Polyarthralgia (%)	30	21,5	20,2	18,5	23,1
Back pain (%)	51,7	44,9	45,2	54,0	48,6
Joint involvement					
Shoulder (%)	33,3	21,5	22,1	22,4	27,2
Hand (%)	16,7	20,0	15,4	13,2	16,5
Knee (%)	49,2	41,0	48,1	46,1	46,2
Ankle (%)	13,3	14,0	13,5	14,5	13,8
Cervical spine (%)	6,0	10,3	9,6	7,9	8,4
Lumbar spine (%)	44,2	39,3	38,0	47,0	41,8
Diagnoses					
Osteoarthritis (%)	53,4	43,9	47,5	56,8	50,2
Knee osteoarthritis (%)	31,5	22,8	28,8	38,6	30,0
Lumbar osteoarthritis (%)	28,8	22,8	30,5	31,8	28,3
Septic (%)	2,7	7,0	1,7	2,3	3,4
Gout (%)	5,5	10,5	5,1	6,8	6,7
Inflammatory (%)	9,6	8,8	6,7	6,8	9,9
Tumor (%)	1,3	1,8	1,7	4,5	2,1

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AB0829 WHAT ARE THE DIFFERENCES BETWEEN YOUNG AND ELDERLY SUBJECTS IN URGENT RHEUMATOLOGY CONSULTATIONS?

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Background: The pattern of rheumatological diseases shows significant differences depending on age. It is commonly admitted that inflammatory rheumatic diseases is the prerogative of young people (1), while degenerative pathology is more important in older ages (2). In the context of the emergency, little epidemiological data exist about the differences between young and old populations.

Objectives: To study the influence of age on emergency rheumatology consultations received in the Department of Rheumatology of the University Hospital of Ibn Rochd.

Methods: We conducted a retrospective study on the 2019 emergency consultations register of the Department of Rheumatology of the University Hospital of Ibn Rochd, Casablanca. Patients were divided in 2 groups: young subjects included patients aged less than 65 years, and the elderly subjects included people aged 65 and above. The studied parameters were gender, medical coverage, socio-professional category, reasons for consultation, joint involvement, duration of symptoms, diagnoses, and treatments.

Results: 407 emergency consultations were carried out, including 81 in the elderly (19.9%) and 326 in young subjects (80.1%). The characteristics are summed up in Table 1. Although we noted a female predominance in both groups, men were more represented in the elderly group. Radiculalgia was a

more frequent reason for consultation in the elderly population, while arthralgia was more frequent in the young population. Young subjects more frequently had peripheral joints complaints. Degenerative and tumor pathologies were more common in the elderly population, while inflammatory, septic, and tendon pathologies were more prominent in the young population. Regarding treatments, non-steroidal anti-inflammatory drugs were more prescribed in young subjects, while the other treatments had a homogeneous distribution in the two groups.

Conclusion: In our emergency unit, the epidemiological distribution of our patients according to age matches the general epidemiological characteristics of rheumatological pathologies: inflammatory causes are more frequent in young ages, while degenerative pathologies are found at a later age.

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Table 1. Patients' characteristics depending on age

	≥ 65 years (81 cases) 19,9%	< 65 years (326 cases) 80,1%
Sex-ratio M/F	0,50	0,38
Social coverage		
Public health assistance scheme	32 (39,5%)	122 (37,42%)
Public/Private insurance	21 (25,92%)	91 (27,91%)
Without	28 (34,57%)	113 (34,66%)
Profession	Précisé = 45	Précisé = 162
Without	36 (80%)	104 (64,2%)
Retirees	7 (15,55%)	4 (2,47%)
Farmer	1 (2,22%)	1 (0,62%)
Intermediate professions	1 (2,22%)	18 (11,11%)
Higher intellectual professions	0	12 (7,41%)
Employees	0	9 (5,55%)
Traders and craftsmen	0	9 (5,55%)
Workers	0	5 (3,09%)
Reason for consultation		
Back pain	35 (43,2%)	137 (48,15%)
Radiculargia	22 (27,16%)	55 (16,87%)
Arthralgias	34 (41,97%)	165 (50,61%)
Arthritis	10 (12,34%)	37 (11,35%)
Joint involvement		
Axial	41 (50,61%)	170 (52,15%)
Peripheral	53 (65,43%)	248 (76,07%)
Duration of symptoms		
Acute (< 3 weeks)	21 (25,92%)	73 (22,39%)
Chronic (≥ 3 weeks)	60 (74,08%)	253 (77,61%)
Diagnoses		
Osteoarthritis	30 (58,82%)	89 (48,9%)
Knee osteoarthritis	21 (41,17%)	50 (27,47%)
Lumbar osteoarthritis	16 (31,37%)	44 (24,17%)
Septic	2 (3,92%)	11 (6,04%)
Metabolic	6 (13,35%)	9 (4,94%)
Inflammatory	1 (1,96%)	22 (12,08%)
Tumor	3 (5,88%)	2 (1,09%)
Tendinopathies	3 (9,68%)	29 (15,93%)
Treatments		
Analgesics	47 (71,21%)	155 (63,52%)
NSAIDs	19 (28,78%)	118 (48,36%)
Corticosteroids	1 (1,51%)	2 (0,82%)
Local treatments	18 (27,27%)	72 (29,5%)
Symptomatic slow-acting drugs	19 (28,78%)	49 (20,08%)
DMARDs	0 (0%)	2 (0,82%)

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AB0830

ADVERSE PERINATAL OUTCOMES AND CONGENITAL DEFECTS IN MEXICAN WOMEN WITH AUTOIMMUNE RHEUMATIC DISEASES

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Background: Pregnancy in women with autoimmune rheumatic diseases (ARD) is associated with an increase in the risk of adverse perinatal outcomes and birth defects. Many factors have been attributed to these including medication

employed and maternal autoantibodies. The national prevalence of congenital anomalies in newborns in Mexico is estimated to be 73.9 per 10,000 births but the rate of these in Mexican women with ARD is unknown.

Objectives: This study aims to describe the frequency of adverse perinatal outcomes and congenital defects in Mexican women with ARD.

Methods: We performed a descriptive and prospective study that included all pregnant patients with ARDs from the clinic of pregnancy and rheumatic diseases in the University Hospital "Dr. José Eleuterio González" who gave birth between February 2019 to November 2020. Demographic information, pregnancy outcome, and congenital defects were prospectively evaluated. Congenital defects were clinically confirmed by a clinical geneticist.

Results: A total of 40 women were taken in the final analyses. The ARD diagnosis is shown in graphic 1. Rheumatoid arthritis was the most frequent diagnosis that had an adverse perinatal outcome with 4 (40%) and congenital defects in 2 (40%). No complications or birth defects were reported in 25 (62.5%). The adverse perinatal outcome was reported in 10 (25%) women and congenital defects in 5 (12.5%). The most frequent adverse perinatal outcomes were preterm birth 6 (15%) and the second most frequent miscarriage 3 (7.5%) (Table 1 below).

Conclusion: We found a high frequency (12.5%) of adverse perinatal outcomes and congenital defects in Mexican women with ARD. Multidisciplinary groups and clinics are needed to adequately serve this complex population and reduce morbidity and mortality. A multidisciplinary approach before, during, and after pregnancy in patients with ARD may improve morbidity and mortality.

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Graphic 1. Percentage of adverse perinatal outcomes and congenital defects due to rheumatic disease.

Table 1. Frequency and percentages of adverse perinatal outcomes and congenital defects.

	Adverse perinatal outcome (n=10) 25%	Congenital defects (n=5) 12.5%
Preterm birth	6 (15%)	-
Miscarriage	3 (7.5%)	-
Stillbirth	1 (2.5%)	-
Congenital heart disease*	-	1 (2.5%)
Congenital cardiac block with pacemaker placement	-	1 (2.5%)
Krabbe's disease	-	1 (2.5%)
Preauricular appendix	-	1 (2.5%)
Diabetic fetopathy	-	1 (2.5%)

*Tetralogy of Fallot

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