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Knee osteoarthritis (KOA) is a prevalent form of chronic joint disease associated with functional restrictions, morphological changes and pain. Pain and disability from KOA negatively impact social connectedness and psychological well-being, reducing the quality of life (QoL) of patients. Assessing QoL is an imperative first step in evaluating well-being, disease progression, and intervention efficacy. Our purpose was to provide an international resource summarizing available studies reporting on QoL and individual factors affecting it in KOA patients. Patient organization representatives designed and executed this summary to prompt routine evaluation of such.

We conducted a systematic review examining the literature up to JAN2017 at MEDLINE, EMBASE, Cochrane, and PsycINFO using KOA and QOL related keywords. All articles were reviewed by 3 independent reviewers. QoL domains and relevant items were extracted. Only original articles were included. The quality of included studies was assessed using a quality appraisal tool. Inclusion criteria were QOL compared to at least one demographic factor (e.g., age, gender), lifestyle factor (e.g., functional independence), or comorbidity factor (e.g., diabetes, obesity) and a control group.

A total of 610 articles were reviewed, 62 met inclusion criteria. All studies reported worse QoL in KOA patients when compared to a control group. Females reported worse QOL than males. Obesity and lower levels of physical activity were associated with lower QoL scores. Knee self-management programs delivered by healthcare professionals improved QoL. Educational level and higher total mindfulness were reported to improve QoL whereas poverty, psychological distress, depression and lacking familial relationships reduce it. Surgical KOA intervention outcomes depended on patients' individual factors.

KOA studies routinely include pain and function scores yet haven't routinely included psychosocial variables assessing QoL, which influences how patients feel, function, and survive. KOA has a substantial impact on QoL. In KOA patients, QoL is influenced by specific individual factors including gender, body weight, physical activity, mental health, and education. Importantly, education and management programs designed to support KOA patients report improved QoL. QoL data is a valuable tool providing health care professionals with a better comprehension of KOA disease to aid the implementation of the most effective management plan. Ensuring a standard QoL assessment is implemented, as routine care globally is imperative for healthcare professionals to gain a better understanding of OA disease whilst ensuring the most optimal management.

## 109

### AN EXPERT CONSENSUS ON THE APPROPRIATE USE OF ORAL SYSADOAS FOR THE TREATMENT OF THE OSTEOARTHRITIC PATIENT IN PRIMARY HEALTH CARE: A DELPHI STUDY

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Clinical studies have demonstrated that osteoarthritis pain is linked to disability and quality of life (QoL). The therapeutic modalities in the treatment of osteoarthritis (OA) are numerous and despite evidence-based guidelines for OA management, agreement on treatments is lacking. There is disagreement about Symptomatic Slow-Acting Drugs (SYSADOA), use in OA clinical practice. The objective of this work was to homogenize the prescription criteria for oral SYSADOAs as a support instrument to health professionals and in particular to the primary care physicians (PCP). We prepared a consensus document on the appropriate use of oral SYSADOAs: chondroitin sulphate (CS), glucosamine(G), diacerein(D) and the combination of CS plus G for OA management in primary care.

We apply the Delphi technique of two rounds; 24 clinical questions were evaluated, and a total of 206 specific consultations were formulated. Three rheumatologists, 2 PCP, 1 clinical pharmacologist constitute the expert committee and validated the questionnaire. A panel of 14 experts in OA and SYSADOAs use responded to the two rounds of consultation through an online platform. The

results were analysed and discussed in a face-to-face meeting with the coordinators and scientific committee and were classified in terms of Unanimity, Consensus, Majority, and Discrepancy. Items that reached consensus by at least 80% across both panels were included in the guidelines. The fieldwork lasted 4.5 months.

Consensus statements emerged: (1) patient phenotypes affect SYSADOAs action; (2) SYSADOAs are effective in primary and secondary OA, in the three first grade of Knee OA, hand and hip; no appropriate for erosive hands, shoulder, spine, and ankle OA; (3) CS, G and association can reduce pain, inflammation, improve QoL and functional capacity and have a chondroprotective effect; (4) CS and D can reduce synovial membrane inflammation, all oral SYSADOAs, except D, can decrease cell death and the enzymes responsible for cartilage destruction; (5) The maximum therapeutic efficacy is reached after 3/6 months; (6) SYSADOAs can be prescribed to patients having comorbidities. There is disagreement in the prescription of oral SYSADOA in patients with liver and kidney disease.

This work is the first available tool on the appropriate use of oral SYSADOAs. It combines the available evidence and the opinion of experts. The dissemination of consensus statements among PCP professionals will contribute to improving management protocols and will be a useful instrument in situations of uncertainty by ensuring a personalized treatment to OA patients and to ameliorate their QoL.

## 151

### RELATIONSHIP BETWEEN IMMUNE MARKERS AND HEMATOLOGICAL MANIFESTATIONS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS IN QUITO- ECUADOR

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**Background:** Systemic lupus erythematosus (SLE) is an autoimmune disease with heterogeneous clinical and immunologic expression. Factors that determine the behavior of the disease in a particular individual are variable; however, there are immunological markers which have shown associations with clinical manifestations, including hematological abnormalities.

**Objective:** Establish the relationship between the presence of hematological abnormalities and the expression of autoantibodies in patients with systemic lupus erythematosus.

**Methods:** An analytic, observational, cross-sectional study was conducted. 179 patients with a diagnosis of SLE were evaluated at a tertiary hospital in Quito from January 2015 to December 2017, through medical record reviews and laboratorial findings. Information was tabulated to carry out a descriptive and inferential analysis of associations between immunological markers and hematological involvement in said population.

**Results:** The prevalence of hematological involvement was 81%. The most frequent manifestation was anemia (71.5%). There was a positive association between many immunological markers and hematological abnormalities in this study such as: antinuclear antibodies (ANA) and hematological manifestations (p = 0.008; OR = 3.91; 95% CI 1.34-11.4); between ANA and anemia (p = 0.01; OR = 3.7; 95% CI 1.29-10.56); ANA and leucopenia (p = 0.01; OR = 5.4; 95% CI 1.18-24.54); ANA and lymphopenia (p = 0.03; OR = 4.64; 95% CI 1.02-21.1); C3 and anemia (p = 0.01; OR = 2.53; 95% CI 1.23-5.2); C4 and anemia (p = 0.02; OR = 2.29; 95% CI 1.12-4.68); and between antiphospholipid antibodies and thrombocytopenia (p = 0.01; OR = 2.7; 95% CI 1.2-6.07).

**Conclusion:** There is a statistically significant association between the expression of immunological markers in SLE and hematological abnormalities found in this group of patients.

## 113

### PREDICTIVE FACTORS FOR THE DEVELOPMENT OF PROTEINURIA IN MALE PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS IN A GUATEMALA RHEUMATOLOGY CENTER

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**Object:** The following study aimed to describe the clinical and laboratory findings of this group of patients and to identify predictive findings for the appearance of proteinuria in the follow-up.

**Methods:** We took all male patients (N = 37) in a single rheumatology center of the Guatemalan Social Security Institute that met the 1997 criteria of the American College of Rheumatology (ACR) for SLE during the period between 2002 and 2018 with follow-up at least 12 months. Demographic, clinical and laboratory data were included. Multivariate regression analysis and Odds Ratio (OR) estimation were used to predict proteinuria during follow-up.

**Results:** Four hundred and fifty patients with SLE were diagnosed, of which 8.2% (N = 37) were men, with a mean age of 46 years, an average clinical follow-up of 85 months, 78.4% and 48.6% had low levels of C3 and C4 respectively, 62.2% had proteinuria >500 mg / 24 hours and their appearance occurred 10 months after diagnosis, positivity for ANA, Anti-dsDNA and Anticardiolipin IgG and IgM antibodies were 48.6%, 64.9% and 29.7% respectively, the mean ESR was 49.9 mm / h. In the multivariable logistic regression analysis and OR estimation, the low values of C3 (OR: 12, 95% CI: 0.4-303, p: 0.01) and ESR > 30 mm / h were statistically significant (OR: 45.9, 95% CI: 2.3- 909, p: 0.01) for the prediction of proteinuria presentation 10 months after the diagnosis of SLE in male patients.

**Conclusion:** In our clinical center, low levels of C3 and ESR > 30 mm/h in male patients may be predictive factors for the appearance of proteinuria after the diagnosis of SLE.

Table 1

Study variable	N=37 (100%)
Age (years)	46.0
Follow-up time (months) $\bar{x}$	85.0
C3 (mg/dl) $\bar{x}$	65.6
C4 (mg/dl) $\bar{x}$	14.0
Low C3 levels (%)	78.4
Low C4 levels (%)	48.6
Proteinuria (mg/24h) $\bar{x}$	3179.4
Proteinuria >500 mg/24h (%)	62.2
Time of proteinuria appearance (months) $\bar{x}$	10.0
White Cell Blood (uL) $\bar{x}$	7573.0
Leucopenia (%)	24.3
Hemoglobin (g/dL) $\bar{x}$	12.5
Anemia (%)	64.9
Platelets (uL) $\bar{x}$	191065
Thrombocytopenia (%)	29.7
Positive Anti-dsDNA (%) $\bar{x}$	64.9
SLEDAI (points) $\bar{x}$	6
ESR (mm/h) $\bar{x}$	49.9
ESR > 30 mm/h (%)	59.5
Creatinine (mg/dl) $\bar{x}$	1.7
Diabetes mellitus (%)	29.7
Systemic arterial hypertension (%)	16.2
Positive ANA (%)	48.6
Positive Anti-cardiolipin IgG/IgM (%)	29.7

Table 2

Multivariate regression analysis and risk estimation			
Study variable	OR	p value	95% CI
Low C3 levels	12.00	0.01	0.4 - 303
ESR > 30 mm/h	45.91	0.01	2.3 - 909
R <sup>2</sup>	0.58		

188

## SEXUAL DYSFUNCTION IN WOMEN WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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**Introduction:** Sexual dysfunction may affect one or several phases of sexual activity (desire, excitement, plateau, orgasm and resolution); this can culminate in frustration, pain and a decrease in the frequency of sexual intercourse. There are few studies that associate sexual dysfunction with Systemic Lupus Erythematosus (SLE) due to the difficulty in assessing it and its multifactorial cause.

**Objective:** Determine the frequency of sexual dysfunction and analyze associated factors in patients with SLE.

**Materials and methods:** A descriptive cross-sectional study was conducted. We included patients who were followed up the Rheumatology unit between May and July 2019; over 18 years of age, with a diagnosis of SLE according to the ACR 1997 and / or SLICC 2012 criteria, and healthy patients matched by age as control. Demographic and disease-related variables were studied. The DASS-21 (Depression Anxiety Stress Scale) scale that evaluates depression, anxiety and stress, and the Female Sexual Function Index (FSFI) that assesses 6 domains (desire, excitement, lubrication, orgasms, satisfaction and pain) were applied with a cut-off point  $\leq 26.5$  to define sexual dysfunction. Women over 50 years old, with secondary Sjogren's syndrome, menopause, severe depression and illiterate patients were excluded.

**Results:** One hundred and twenty-three women were included (60 with SLE and 63 controls), with a mean age of  $34.3 \pm 8.3$  and  $31.7 \pm 4.4$  years respectively. The prevalence of sexual dysfunction in the SLE group was 71.7%; 95% CI = [58.5 – 82.5], and 23.8%, 95% CI = [13.9 – 36.2] in healthy patients. There were significant differences in all domains of sexual function between women with SLE and healthy group. In the desire, excitement and pain domains the differences were notable. The total FSFI score in patients with SLE was  $18.2 \pm 11.2$  and in healthy women  $28.3 \pm 6.9$  (p=0.001). Stress, anxiety and depression were observed in 58.4%, 58.3% and 50% of women with SLE and 19%, 20.6% and 28.5% of healthy women respectively (p=0.001). No association was found between sexual dysfunction and age, age at diagnosis, disease activity or treatment (p: NS). No association was found in patients with SLE when analyzing the relationship between sexual dysfunction in stress, depression and anxiety variables, in opposition to the healthy group (p<0.05).

**Conclusion:** The prevalence of sexual dysfunction in patients with SLE was high (71.7%). Depression, Anxiety, and Stress were associated with Sexual Dysfunction.

185

## COMORBIDITIES IN RHEUMATOID ARTHRITIS: UTILITY OF RACI SCORE (RHEUMATOID ARTHRITIS COMORBIDITY INDEX)

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**Objectives:** To determine the prevalence of comorbidities in Rheumatoid Arthritis (RA) and to evaluate associated variables.

**Materials and methods:** A descriptive cross-sectional study was conducted. We included patients over 18 years of age, who attended the Rheumatology of office between May and August 2018 with a diagnosis of RA according to the ACR 1987 and ACR/EULAR 2010 criteria. Demographic variables were studied along with disease-related variables (time of evolution, disease activity by DAS-28 and CDAI, treatment and functional capacity (HAQ-A)). The presence of comorbidities was evaluated using two indexes: Rheumatoid Arthritis Comorbidity Index (RACI) and Disease Comorbidity Index (RDCI). RACI consists of 31 comorbidities grouped into 11 categories: DAS 28 >3.6, local inflammation, smoking, tumors, systemic involvement, infection, vascular disease, bone health, mood, metabolic and cardiovascular disorders (score range 0-36). RDCI consists of 11 comorbidities (categories according to ICD-10) and a formula to calculate it (range 0-9). For both indexes; higher score, greater comorbidity.

**Results:** In this cross-sectional study, 345 patients were evaluated, of which 176 were included, 85.8% of the patients were female and the mean age was  $52.7 \pm 10.9$  years; 31.2% of the cases finished primary school, the median of disease duration was 9 years (1-40), the mean DAS28  $3.8 \pm 1.4$ , and the mean CDAI  $12.4 \pm 11.3$ . 52.3% of the patients received treatment with glucocorticoids, 60.8% with NSAID, 60.2% with methotrexate, 39.2% with leflunomide, 17.6% with biologic DMARDs and 5.6% with tofacitinib. 90.3% of the patients