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Baseline Disease Activity, Not Baseline Corticosteroid Use, Predicts Difficulty in Corticosteroid Withdrawal in Rheumatoid Arthritis using Synthetic DMARD: A Brazilian Real-World Cohort

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Introduction: In rheumatoid arthritis (RA), prolonged corticosteroid use is associated with adverse outcomes, making timely withdrawal essential. However, difficulty in tapering remains common. Identifying predictors of corticosteroid dependence is key for individualized treatment.

Objectives: To identify clinical and disease activity parameters associated with failure to discontinue corticosteroids in a real-world Brazilian cohort.

Methods: Longitudinal analysis of 433 patients from 11 centers in the REAL study (2015–2016), meeting 2010 ACR/EULAR criteria. Patients were classified by induction strategies (synthetic DMARD with or without corticosteroids). Disease activity was assessed using DAS28-ESR, DAS28-CRP, SDAI, CDAI, and RADAI. Logistic regression identified predictors of withdrawal failure, and ROC curves determined optimal cut-offs.

Results: High baseline disease activity was the main predictor of withdrawal difficulty, while baseline corticosteroid use was not independently associated. In Combination Therapy, higher activity increased failure risk (OR = 1.40; $p < 0.001$), with a non-significant trend in males (OR = 2.17). CDAI had the highest accuracy (cut-off > 7.0), with other indices also indicating risk (SDAI > 6.92, RADAI > 1.80, DAS28-ESR > 4.01, DAS28-CRP > 3.12), highlighting baseline inflammation as the key determinant.

Conclusion: Difficulty in corticosteroid withdrawal in RA is mainly driven by baseline inflammatory burden rather than treatment strategy or early corticosteroid use. Higher

baseline activity identifies patients at greater risk, supporting early recognition and timely optimization of disease-modifying therapy to enable successful tapering.

PT.02

CHEST CT–DERIVED MUSCLE ANALYSIS IN SYSTEMIC SCLEROSIS: THORACIC LEVELS AS ALTERNATIVES FOR OPPORTUNISTIC SARCOPENIA ASSESSMENT

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Introduction: Systemic sclerosis (SSc) is a complex autoimmune disease marked by vasculopathy, inflammation, and fibrosis, with significant musculoskeletal involvement. Emerging evidence highlights sarcopenia and intramuscular fat infiltration as key contributors to functional decline, frailty, and poor clinical outcomes. Computed tomography (CT), routinely performed for pulmonary assessment in SSc, offers a unique opportunity for body composition analysis, enabling simultaneous evaluation of skeletal muscle quantity and quality without additional cost or radiation exposure.
Objectives: To quantitatively characterize skeletal muscle mass and intramuscular fat infiltration in SSc using chest CT, and to determine the reliability and clinical value of thoracic vertebral measurements as an opportunistic assessment tool.
Materials and Methods: In this cross-sectional study, 58 patients with SSc underwent chest CT analysis using SliceOmatic software. Measurements were obtained at T10, T11, and T12, including skeletal muscle area (SMA), skeletal muscle index (SMI), skeletal muscle radiation attenuation (SMRA), intermuscular adipose tissue (IMAT), IMAT percentage (IMAT%), and skeletal muscle gauge (SMG). Results were expressed as mean ± standard deviation. Effect size (Cohen's d) was used to assess differences between vertebral levels and the robustness of measurements.
Results: Sarcopenia was highly prevalent (69%) in this cohort, highlighting a substantial and likely underrecognized contributor to disease burden in SSc. Mean SMI values were consistent across vertebral levels (29.96, 29.36, and 30.40 cm^2/m^2 at T10–T12), supporting the reliability of thoracic measurements. Sarcopenic patients demonstrated markedly reduced muscle mass, with large effect sizes, particularly for SMI at T12 (28.03 vs 35.66 cm^2/m^2; $p < 0.001$; $d = -1.43$), confirming its strong discriminatory capacity. In contrast, muscle quality parameters (SMRA, IMAT%, SMG) did not differ significantly between groups, indicating that reduced muscle quantity—rather than altered muscle quality—is the predominant feature of sarcopenia in SSc. Importantly, a strong inverse correlation between SMRA and IMAT% at T12 ($\rho = -0.645$) confirms the physiological validity of CT-derived muscle quality metrics, even though they did not independently identify sarcopenia in this population. Measurements at T10 and T11 showed strong agreement with T12, demonstrating that clinically meaningful muscle assessment can be reliably obtained from routine chest CT scans, even when standard landmarks are not available.
Conclusion: Sarcopenia affects the majority of patients with SSc and is primarily driven by substantial loss of skeletal muscle mass, rather than changes in muscle quality. These findings highlight a critical, actionable component of disease burden that is not routinely assessed in clinical practice.

Opportunistic analysis of chest CT provides a practical, scalable, and cost-neutral strategy for early identification of high-risk patients. Incorporating muscle mass evaluation into routine imaging interpretation could enable timely implementation of targeted interventions, including nutritional optimization and structured rehabilitation, with the potential to improve functional outcomes and reduce morbidity. The demonstrated reliability of measurements at multiple thoracic levels further supports the feasibility of integrating body composition analysis into standard radiological workflows, reinforcing chest CT as a valuable tool for comprehensive risk stratification in SSc.

References:

Kaltenhauser S Sci Rep. 27;13(1):18450, 2023.
Derstine BA Sci Rep. 27;8(1):11369, 2018.

PT.03

Comparative Analysis of Histological Indices as Predictors of Renal Response in Lupus Nephritis Patients

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Background. Lupus nephritis (LN) affects up to 50% of systemic lupus erythematosus (SLE) patients and leads about 20% to chronic kidney disease (CKD) within 15 years. The 2018 ISN/RPS kidney biopsy LN classification incorporated National Institutes of Health (NIH) activity (AI) and chronicity (CI) indices, but these do not fully capture all renal compartments. Hill et al. proposed an expanded histological score. The aim of this study is to compare NIH and Hill indexes for predicting Target Renal Response (TRR) at 3, 6 and 12 months and CKD at 6 months. **Methods.** Multicentric cohort of SLE patients≥18 years (SLICC, 2012) and biopsy-proven active LN [classes III or IV (± V) or V] diagnosed between 2020-2024. Exclusion criteria: contraindication or refusal to kidney biopsy, insulin-dependent diabetes and pregnancy. Biopsies were blindly reviewed by a nephropathologist scoring NIH AI, NIH CI and Hill score domains (glomerular, tubulointerstitial, chronicity, immunofluorescence). TRR: ±10% of baseline creatinine and proteinuria decline ≥25% at 3 months, ≥50% at 6 months, and <0.8g/24h at 12 months. CKD: eGFR<60 mL/min/1.73m² at 6 months. **Results.** Forty patients were included (82.5% women; mean age 32.9±8.3years). Median serum creatinine was 0.8mg/dL (0.4–2.9); 16.2 % had CKD. LN classes III/IV (±V) comprised 80% of cases and class V, 20%. NIH and Hill scores were similar for predicting TRR and CKD. Baseline NIH AI was higher in patients who achieved TRR at 6 months [3 (0–8) vs 1.5 (0–7); p=0.024] and 12 months [4 (0–8) vs 1 (0–8); p=0.030]. Baseline Hill glomerular index was higher in TRR achievers at 6 months [2 (0–8) vs 1 (0–6); p=0.027] and 12 months [2 (0–8) vs 1 (0–8); p=0.037] and total Hill score was higher in those with TRR at 12 months [1.30 (0.49–2.02) vs 0.82 (0.49–1.83); p=0.017]. No significant differences were found for CI and immunofluorescence scores across time points. CKD at baseline and at 6 months was associated with higher CI in NIH and Hill evaluations.**Conclusion.** NIH and Hill indices presented similar early prediction of TRR and CKD. Elevated baseline NIH AI and Hill scores marked greater likelihood of TRR, while CI remained the mainly predictor of CKD. Selected Hill components may refine risk stratification and guide therapy in LN.

PT.04

ANÁLISE DE CLUSTERS NO LÚPUS ERITEMATOSO SISTÊMICO: SUBGRUPOS COM ATIVIDADE E PERFIS DE AUTOANTICORPOS DISTINTOS

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ABSTRACT

Background: Systemic lupus erythematosus (SLE) is a chronic immune-mediated and heterogeneous disease characterized by multisystem involvement and a variety of autoantibodies. Such variability challenges diagnosis andtreatment. Cluster analysis using machine learning has identified subgroups with aligned clinical and serological profiles, aiding personalized care. **Methods:** A K-means clustering analysis was performed on the serological profiles of 245 SLE patients (ACR/SLICC). Clinical variables (prior or current renal, central nervous system, cutaneous, serosal, vasculitic, and articular involvement), serological markers (positivity for anti-dsDNA, anti-C1q, anti- nucleosome, anti-Sm, anti-RNP, anti-P-ribossomal, anti-La-SSB, anti-Ro-SSA, anti- MPO, anti-PR3, anticardiolipin IgG/IgM, cryoglobulins, and complement consumption), and sociodemographic data (age, sex, and race/color) were included. Disease activity was assessed by SLEDAI. The optimal number of clusters was determined through silhouette analysis, elbow method, and clinical interpretability. Group comparisonsused chi-square and Fisher's exact tests. **Results:** The mean age was 37.2±11.5 years (95.1% female; 54.2% White). Four distinct clusters were identified (Table 1). Clusters 1 and 4 showed higher SLEDAI, younger ages, increased positivity for anti- dsDNA and anti-nucleosome antibodies and complement consumption than clusters 2 and 3. All patients in clusters 3 and 4 were positive for anti-Ro-SSA antibodies. A significant association was observed between clusters 1 and 4 and serositis (p=0.005), with a linear trend toward greater articular involvement (p=0.040). No significant differences were seen for other organ systems. **Conclusions:** Clustering identified four distinct clinical-serological subgroups in SLE, underscoring its heterogeneity and the need for personalized clinical approaches.

Keywords: systemic lupus erythematosus, antibodies, subgroups.

Table – Cluster analysis based on autoantibody profile in 245 patients with SLE, n (%)

	Cluster 1 n=73	Cluster 2 n=82	Cluster 3 n=44	Cluster 4 n=46	p
Age	33,2±(9,08)	40,3±(12,87)	40,0±1 (12, 0)	35,1±(9,35)	< 0,001
Female	67(91,7)	78(95,1)	43(97,7)	45(97,8)	
White race	38(28,6)	47(35,3)	23(17,3)	25(18,8)	
SLEDAI*	8,9±7,6	4,3±4,6	4,3±4,4	10,3±7,9	< 0,001
Central Nervous System	13(17,8)	15(18,3)	8(18,2)	8(17,4)	0,999

Cutaneous	70(95.9)	76(92.7)	41(93.2)	43(93.5)	0.859
Cutaneous vasculitis	21(28,8)	16(19,5)	5(11,4)	8(17,4)	0,13
Articular	56(76,7)	65(79,3)	39(88,6)	41(89,1)	0,195
Renal	54(74,0)	53(64,6)	28(63,6)	32(69,6)	0,559
Mucocutaneous	17 (23,3)	16 (19,5)	14 (31,8)	10 (21,7)	0,473
Hematologic	60 (82,2)	59 (72,0)	31 (70,5)	35 (76,1)	0,401
Serositis	32(43,8)	17(20,7)	13(29,5)	21(45,7)	0,005
Anti-dsDNA	55(75,3)	27(32,9)	14(31,8)	45(97,8)	< 0,001
Anti-nucleossome	73(100,0)	0(0,0)	8(18,2)	46(100,0)	< 0,001
Anti-C1q	20(27,4)	22(26,8)	9(20,5)	19(41,3)	0,155
Anti-Ro-SSA	0(0,0)	0(0,0)	44(100,0)	46(100,0)	<0,001
Anti-La-SSB	1(1,4)	0(0,0)	11(25,0)	6(13,0)	<0,001
Anti-Sm	16(21,9)	14(17,1)	6(13,6)	8(17,4)	0,708
Anti-RNP	21(28,8)	12(14,6)	13(29,5)	17(37,0)	0,029
Anti-P-Ribossomal	5(6,8)	2(2,4)	2(4,5)	0(0,0)	0,233

PT.05

DIAGNOSTIC PERFORMANCE OF ATTRIBUTION MODELS IN NEUROPSYCHIATRIC LUPUS: VALIDATION USING MULTIDISCIPLINARY CONSENSUS IN A TERTIARY BRAZILIAN COHORT

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Introduction: Neuropsychiatric systemic lupus erythematosus (NPSLE) is one of the most severe manifestations of SLE, and attributing neuropsychiatric (NP) events to the disease itself remains a major clinical challenge. Several attribution models have been proposed, including SLICC Models A and B and the Italian Algorithm, but their external validity in Latin American populations with distinct disease profiles remains unexplored.

Objectives: To evaluate the diagnostic performance of SLICC Models A and B and the Italian Algorithm for NPSLE attribution in a Brazilian tertiary referral cohort, using multidisciplinary clinical consensus as the reference standard.

Materials and Methods: Retrospective cohort study including patients who fulfilled the 2019 EULAR/ACR classification criteria for SLE and presented with NP events, followed at a tertiary referral center between 2017 and 2024. NP events occurring at any point during the disease course were eligible for analysis and were prospectively evaluated during routine care by a multidisciplinary team (neurologists, rheumatologists and/or psychiatrists), whose consensus served as the reference standard. Attribution models were applied retrospectively. Diagnostic performance metrics — sensitivity, specificity, positive and negative predictive values, likelihood ratios and Cohen's kappa — were calculated for each model. Sensitivity analyses for SLICC Models A and B were performed restricting the dataset to events occurring within 15 months of SLE diagnosis, corresponding to the original SLICC enrolment window.

Results: Eighty patients (median age 26 years, 90% female) contributed 113 NP events, of which 64 (56.6%) were attributed to SLE by multidisciplinary assessment. Seizures, psychosis and cerebrovascular disease were the most frequent manifestations. SLICC Model A showed high specificity (97.8%) with strong rule-in performance (LR+ 21.3) but low sensitivity (46.3%; kappa 0.39). SLICC Model B demonstrated a more balanced profile [sensitivity (55.2%) and specificity (89.1%; LR+ 5.08; kappa 0.41)]. The Italian Algorithm achieved the highest sensitivity (97.0%) and strongest rule-out performance (LR- 0.047; kappa 0.63), albeit with modest specificity (63.0%). Sensitivity analyses restricted to events within 15 months of diagnosis showed improved performance for both SLICC models, with substantial agreement (kappa 0.71 and 0.75, respectively). Analysis of discordant cases revealed that most false negatives in SLICC models were driven by temporal rigidity, while false positives in the Italian Algorithm involved conditions such as neuromyelitis optica spectrum disorder and steroid-induced psychosis.

Conclusion: In a Brazilian cohort with high prevalence of major NP manifestations, the three attribution models showed distinct and complementary diagnostic profiles. SLICC Model A is best suited as a rule-in tool for research settings requiring diagnostic

certainty, while the Italian Algorithm performs optimally as a rule-out instrument in ambiguous clinical presentations. These findings support the use of attribution models as complementary decision-support tools rather than substitutes for multidisciplinary clinical assessment and highlight the need for continued refinement incorporating modern biomarkers and prospective validation.

PT.06

COLÁGENO TIPO V COMO EIXO REGULADOR DA INFLAMAÇÃO E FIBROSE SINOVIAL VIA WNT EM MODELO DE ARTRITE INDUZIDA POR MBSA/ACF

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Introdução: A AR é uma doença inflamatória autoimune crônica que desencadeia um intenso infiltrado inflamatório e a proliferação de sinoviócitos semelhantes a fibroblastos (SSF) no tecido sinovial. Esse processo desencadeia remodelamento da matriz extracelular (MEC) e à exposição do colágeno tipo V (Col V), uma proteína normalmente não exposta ao sistema imune, que passa a ser alvo da resposta imunológica em várias enfermidades. Objetivo: Portanto, no presente estudo avaliamos a participação do Col V, na evolução do processo inflamatório e o remodelamento sinovial, após 7 e 14 dias da indução da artrite em ratos, assim como relacionamos o desenvolvimento desses processos com proteínas de sinalização. **Material e métodos:** Ratos Lewis machos foram divididos em dois grupos: artrite induzida por injeção intra-articular de mBSA/ACF no joelho direito, eutanasiados 7 dias após indução (AI-D 7d, n=23), e eutanasiados 14 dias após indução (AI-D 14d, n=23). O joelho esquerdo utilizamos como controle (AI-E 7d e AI-E 14d). Avaliamos a estrutura do tecido sinovial e remodelamento por H&E imunohistoquímica, imunofluorescência e expressão gênica para marcadores fibróticos, inflamatórios e de interação celular. Ainda, no estudo in vitro, foram analisados, por imunofluorescência, a expressão de Col I e III, α-actina de músculo liso (α-AML) e integrina β1 nos SSF estimulados com Col V. **Resultados:** Nos grupos AI-D 7d e AI-D 14d houve espessamento da membrana sinovial, infiltrado inflamatório e depósito de colágeno na subíntima sinovial, além do aumento de Wnt5a (p=0,0001; p=0,0279), Col V (p=0,0021; p=0,0101) e expressão gênica de Il1b (p=0,0073; p=0,0223), e ainda, diminuição de Itga5 (p=0,0335; p=0,0133). Além disso no grupo AI-D 7d, também observamos aumento de Wnt3a (p=0,004), expressão gênica de Col1a1 (p=0,0002), Col3a1 (p=0,0145) e Col5a1 (p=0,0271). Adicionalmente, no estudo in vitro, observamos aumento de Col I (p=0,0030; p=0,0034; p=0,0355) e III (p=0,0035; p=0,0017; p=0,0401) nos SSF estimulados com Col V nas concentrações de 100, 50 e 25 µg/mL. Com relação ao grupo AI-14d, identificamos aumento da expressão gênica de Il6 (p=0,0002) e diminuição dos genes Itga2 (p=0,0051) e Itgb1 (p=0,0298). Referente ao grupo AI-E 7d, obtivemos aumento do Col III (p=0,0012; p=0,0020; p=0,0023), após estímulo com Col V (100, 50 e 25 µg/mL) in vitro. Ainda, no estudo in vitro, não houve alteração na expressão de α-AML e integrina β1 entre os grupos AI-D 7d e AI-E 7d, e para Col I no grupo AI-E 7d. **Conclusão:** Nossos achados apontam, até o momento, que o Col V não apenas participa da remodelação da MEC na artrite, mas também pode atuar como

indutor da fibrose sinovial, modulando a resposta inflamatória por meio de vias de sinalização associadas à Wnt. Estes resultados apoiam a hipótese de que o Col V pode atuar de duas formas na patogênese da artrite: amplificando o processo inflamatório e a fibrose sinovial, com implicações para estratégias terapêuticas que visem limitar a exposição e o efeito imunológico do Col V.

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PT.07

BEYOND BONE MINERAL DENSITY: BONE MICROARCHITECTURE IN SYSTEMIC LUPUS ERYTHEMATOSUS ASSESSED BY TRABECULAR BONE SCORE (TBS)

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Introduction: Systemic lupus erythematosus (SLE) is associated with impaired bone health through glucocorticoid exposure, vitamin D deficiency, and chronic inflammation. Bone mineral density (BMD) does not fully reflect fracture risk, as many fractures occur despite normal or only mildly reduced BMD, including in SLE. Trabecular Bone Score (TBS), derived from lumbar spine DXA, provides an indirect assessment of bone microarchitecture. However, data on TBS in SLE remain limited, and disease-related determinants of impaired bone quality are poorly characterized.

Objective: To compare bone microarchitecture, assessed by TBS, between women with SLE and healthy controls, and to identify lupus-related factors associated with worse bone microarchitecture.

Materials and Methods: In this cross-sectional study, 126 women fulfilling the 2019 ACR/EULAR classification criteria for SLE were compared with 1:1 matched healthy controls by age, menopausal status, and body mass index (BMI). Participants underwent clinical evaluation including disease activity (SLEDAI), cumulative damage (SLICC-SDI), laboratory testing, DXA-derived lumbar spine and femur BMD, spine TBS, and vertebral fracture assessment. TBS was compared between groups, with additional analyses stratified by age group and menopausal status. Concordance between TBS and BMD categories was also assessed. Within the SLE group, patients were classified according to degraded versus non-degraded TBS using a previously established cutoff for Brazilian women (<1.365). Multivariable analyses were performed after excluding women with fractures, because osteoporosis with fracture is a component of the SLICC-SDI. After collinearity assessment, linear regression models treating TBS as a continuous outcome were prioritized.

Results: Among the SLE patients, mean age was 45.5 ± 10.7 years, BMI was 27.2 [24.1-31.6] kg/m², median disease duration was 16.0 [8.0-22.0] years, and 60 (47.6%) were postmenopausal. Compared with controls, women with SLE had lower TBS (1.400 ± 0.103 vs 1.472 ± 0.107; p<0.001), lower lumbar spine BMD (p<0.001), and lower femoral neck BMD (p=0.022). Discordance between BMD and TBS categories was more frequent in SLE, particularly degraded TBS despite normal BMD (23.4% vs 6.9%; OR 2.75, p=0.003). Degraded bone microarchitecture (TBS <1.365) was present in 44 SLE patients (34.9%). Compared with those with TBS ≥1.365, women with degraded TBS had lower BMD at all skeletal sites, lower BMI, lower physical activity, and higher glucose levels. In multivariable linear regression analyses restricted to 118 women without fracture, SLICC-SDI was independently associated with lower TBS, with

each 1-point increase corresponding to an approximately 0.0166-unit decrease in TBS (β = −0.0166; 95% CI, −0.0306 to −0.0026; p=0.020). This association remained significant after adjustment for cumulative prednisone dose (β = −0.0159; 95% CI, −0.0299 to −0.0018; p=0.027), whereas cumulative prednisone itself was not associated with TBS (p=0.26), suggesting that the association was not solely driven by glucocorticoid exposure.

Conclusion: Women with SLE had lower TBS than healthy controls. TBS-BMD discordance was also more frequent in SLE, with nearly one in four patients showing degraded TBS despite normal BMD and almost threefold higher odds of discordance than controls. Cumulative organ damage emerged as the main lupus-related factor independently associated with worse bone microarchitecture, suggesting a role of disease burden in impaired bone quality in SLE, a dimension less explored than bone density.

PT.08

FATORES ASSOCIADOS À CONCESSÃO DE BENEFÍCIOS PREVIDENCIÁRIOS E/OU ASSISTENCIAIS EM MULHERES COM FIBROMIALGIA NO BRASIL

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Introdução.
A fibromialgia é uma síndrome dolorosa crônica que compromete qualidade de vida e funcionalidade. Muitos pacientes solicitam benefícios previdenciários devido à limitação funcional, frequentemente em contexto de múltiplas comorbidades. Entretanto, a concessão do benefício previdenciário ou assistencial nem sempre ocorre exclusivamente pelo diagnóstico de fibromialgia, resultando de critérios legais, clínicos e/ou periciais.

Objetivo.
Analisar fatores associados à concessão de benefícios previdenciários e assistenciais em mulheres com fibromialgia no Brasil.

Método.
Estudo transversal com 1313 mulheres diagnosticadas com fibromialgia que responderam questionário online em setembro de 2025. A análise focou nas participantes que solicitaram benefício previdenciário ou assistencial e tiveram concessão (grupo SIM) ou tiveram solicitação negada (grupo NÃO). Variáveis categóricas (escolaridade, raça, presença de laudo PcD e comorbidades) foram analisadas. Comparações entre grupos foram realizadas pelo teste do qui-quadrado de Pearson, utilizando teste exato de Fisher quando necessário. A idade foi comparada pelo teste t de Student. Comparações pós-hoc de proporções utilizaram z-test com correção de Bonferroni. A distribuição geográfica foi analisada por proporções relativas ao total de respondentes por estado ou região, com z-test de proporções. Adotou-se significância estatística de $p<0,05$. Os tipos específicos de benefícios concedidos não foram avaliados.

Resultados.
As respostas foram: “Sim, solicitei e recebi” (n=324) – grupo SIM; “Sim, solicitei e foi negado” (n=351) – grupo NÃO; “Não solicitei” (n=325); “Não se aplica (estou trabalhando)” (n=205); “Não se aplica (não tenho direito a benefícios)” (n=74), “Não respondeu” (n=33). A idade média foi semelhante entre os grupos que solicitaram benefício (SIM 47,4±7,7 anos vs. NÃO 46,4±8,4 anos; p=0,106). Não houve diferença significativa na distribuição de raça (p=0,694) ou na presença de laudo PcD (p=0,118). A escolaridade apresentou diferença global significativa (χ^2=43,3; $p<0,001$): o grupo SIM apresentou maior proporção de ensino superior completo (18,5% vs. 8,8%; p ajustado=0,002) e pós-graduação (17,9% vs. 8,8%; p ajustado=0,004), enquanto o grupo NÃO concentrou maior frequência de ensino médio e fundamental. Na análise geográfica alguns estados apresentaram diferenças: AL, AP e AM mostraram maior proporção de benefícios concedidos, enquanto CE, PB e SP apresentaram maior proporção de benefícios negados ($p<0,05$). As comorbidades mais prevalentes (AR, OA e EPa) tiveram distribuição semelhante entre os grupos ($p>0,05$).

Conclusão.

Mulheres com benefício previdenciário ou assistencial concedido nesta coorte apresentaram maior escolaridade e não se observaram diferenças significativas quanto à idade, raça ou portar laudo PcD. O perfil geral de comorbidades indicou que essas características não influenciaram diretamente, embora a relevância de condições clínicas específicas não possa ser descartada. Diferenças entre estados sugerem possível influência de aspectos administrativos locais. Esses achados reforçam a importância de avaliações clínicas e funcionais abrangentes e equitativas, com análise biopsicossocial, garantindo apreciação adequada das limitações e necessidades dos indivíduos no acesso a benefícios previdenciários e assistenciais.

PT.09

INDICAÇÕES E EFETIVIDADE DO DENOSUMABE NA PRÁTICA REAL EM UM CENTRO TERCIÁRIO PÚBLICO DE ALTA COMPLEXIDADE: UM ESTUDO RETROSPECTIVO

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Introdução

A osteoporose é uma doença esquelética frequente, com redução da densidade e resistência óssea e maior risco de fraturas por fragilidade, associadas a mortalidade, perda de independência e custo em saúde. No Sistema Único de Saúde (SUS), o ácido zoledrônico é disponibilizado por programas de medicamentos de alto custo, enquanto o denosumabe geralmente depende de solicitações. Na prática clínica, porém, suas indicações vão além da insuficiência renal.

Objetivo

Avaliar indicações e desfechos terapêuticos do denosumabe em ambulatório especializado em osteoporose de centro público terciário, com foco em população com múltiplas comorbidades.

Materiais e Métodos

Pacientes em uso de denosumabe para osteoporose (OP) foram identificados em hospital terciário de referência por revisão retrospectiva de prontuários eletrônicos de janeiro de 2013 a dezembro de 2024. Foram analisadas características demográficas, indicações, evolução densitométrica e marcadores de remodelação óssea. Para análise comparativa, os pacientes foram estratificados conforme uso prévio de ácido zoledrônico versus ausência de uso. Variáveis contínuas foram expressas como mediana e intervalo interquartil, e categóricas como frequência e porcentagem. As comparações utilizaram os testes de Wilcoxon, qui-quadrado ou exato de Fisher, com análises conduzidas no software R.

Resultados

Foram incluídos 211 pacientes, com idade mediana de 72,0 (63–82) anos, sendo 84,8% do sexo feminino. A exposição prévia a bifosfonatos orais ocorreu em 85,8%, principalmente alendronato, seguido por risedronato e ibandronato. Bifosfonatos intravenosos foram utilizados por 64%, predominantemente ácido zoledrônico e pamidronato, enquanto 8,5% haviam recebido teriparatida. O número mediano de aplicações de denosumabe foi 2 (0–4). O IMC mediano foi 24,36 (21,05–27,07) kg/m², e os pacientes apresentavam mediana de 2 (1–3) fraturas. As comorbidades mais prevalentes incluíram doenças reumáticas imunomediadas (39,8%), com destaque para artrite reumatoide, doença renal crônica avançada (32,7%), diabetes mellitus tipo 2 (14,7%) e tabagismo (8,5%). As principais indicações para denosumabe foram disfunção renal (43,6%), falha terapêutica aos bifosfonatos intravenosos (34,6%) e osteoporose grave (13,7%). O tratamento foi associado à redução significativa dos níveis de telopeptídeo C-terminal (0,24 [0,18–0,44] vs. 0,10 [0,08–0,22] ng/mL; −56%, $p<0,001$) e ao aumento da densidade mineral óssea no colo do fêmur (0,62 vs. 0,63 g/cm²; +5%, $p=0,018$), quadril total (0,67 vs. 0,71 g/cm²; +3%, $p=0,058$) e coluna lombar (0,73 vs. 0,76 g/cm²; +3%, $p=0,012$). Na comparação entre pacientes com uso

prévio de ácido zoledrônico e aqueles sem uso prévio, houve diferença estatisticamente significativa no quadril total (+1,7% [−4,5–8,8] vs. +8,9% [0,0–18,4]; p=0,037). Não foram identificadas diferenças significativas na coluna lombar ou no colo do fêmur. Ambos os grupos apresentaram reduções semelhantes na remodelação óssea, refletidas por diminuições comparáveis nos níveis de CTX (−57,7% vs. −51,1%; p=0,680).

Conclusão

Neste cenário de prática real de um centro terciário, o denosumabe foi indicado para pacientes com disfunção renal e falha ao uso de bifosfonatos intravenosos. O tratamento mostrou eficácia na supressão da remodelação óssea e na melhora da densidade mineral óssea. Embora a exposição prévia ao ácido zoledrônico tenha sido associada a resposta parcialmente atenuada, benefícios clínicos foram observados. Esses achados reforçam o papel do denosumabe no manejo da OP grave em populações com múltiplas comorbidades.

PT.10

FUNCTIONAL ASSESSMENT IN YOUNG WOMEN WITH TAKAYASU ARTERITIS: INSIGHTS BEYOND MUSCLE MASS AND SARC-F

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Introduction:

Sarcopenia is a musculoskeletal condition that, in its primary form associated with aging, has been extensively studied and is strongly linked to adverse outcomes, including loss of functionality and independence. In recent years, its secondary form, related to chronic inflammatory diseases, glucocorticoid use, and malabsorption, has gained attention. Patients with rheumatologic diseases are at particular risk due to persistent inflammation and frequent glucocorticoid exposure, still necessary for disease control. Takayasu arteritis (TA) is a large-vessel vasculitis that predominantly affects women aged 20–40 years, involving cytokines also implicated in sarcopenia, reinforcing the relevance of studying this condition in this population. In this context, understanding musculoskeletal health in women with TA is essential, given the potential impact on both muscle function and bone health across the lifespan. Current guidelines recommend SARC-F for screening, followed by objective tests (handgrip, chair stand, gait speed) and confirmation with DXA or BIA. However, data on sarcopenia and bone health in young women with TA exposed to chronic inflammation and glucocorticoids remain scarce.

Objective:

To evaluate the prevalence and phenotype of sarcopenia in TA and assess SARC-F performance compared with objective measures of muscle strength, physical performance, and body composition, as well as associations with disease activity, glucocorticoid exposure, and bone mineral density (BMD).

Material and methods:

This cohort study included 28 adults with TA (96.4% women, mean age 47.5 ± 11.7 years) from a tertiary center. Muscle strength (handgrip, chair stand), physical performance (gait speed), body composition and BMD (DXA), disease activity (ITAS2010), fatigue, and quality of life (SF-36, MFI-10) were assessed. Sarcopenia was defined according to European Working Group on Sarcopenia in Older People (EWGSOP2) criteria.

Results:

Although 43% screened positive on SARC-F and 50% had impaired chair stand performance, no patient met criteria for confirmed sarcopenia. Muscle mass was preserved and not associated with disease activity or inflammatory markers. SARC-F

showed poor discriminatory capacity, failing to detect differences in muscle mass, strength, performance, BMD, or quality of life. Functional impairment was not explained by body composition, glucocorticoid exposure, or fatigue. Appendicular lean mass index was positively associated with femoral BMD, supporting preservation of the muscle–bone unit. Fat mass was associated with recent glucocorticoid exposure and worse quality of life. In multivariable analysis, body mass index was the only independent predictor of muscle mass.

Conclusion:

Women with TA may show significant functional impairment despite preserved muscle mass and absence of sarcopenia by current definitions. These findings highlight limitations of SARC-F in non-geriatric inflammatory populations and support a more comprehensive musculoskeletal assessment focused on function, body composition, and bone health. From a women's health perspective, these results reinforce the importance of integrated evaluation of the muscle–bone unit, particularly in young women exposed to chronic inflammation and glucocorticoids, with potential implications for long-term skeletal and functional outcomes.

Bibliography:
Cruz-Jentoft AJ. *Age Ageing*. 48:16, 2018.
Esatoglu SN. *Curr Opin Rheumatol*. 34:18, 2022.
Jin An H. *Int J Mol Sci*. 2020:5678, 2020.

PT.11

LITIFILIMAB IN SYSTEMIC LUPUS ERYTHEMATOSUS (SLE): TOPAZ PHASE 3 PROGRAM STUDY DESIGN AND BASELINE CHARACTERISTICS WITH A LATIN AMERICAN (LATAM) SUBGROUP ANALYSIS

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Introduction: Litifilimab is a monoclonal antibody targeting blood dendritic cell antigen 2 (BDCA2), an inhibitory receptor expressed primarily on plasmacytoid dendritic cells, which are major producers of type I interferons. In Part A of the Phase 2 LILAC study (NCT02847598) in patients with systemic lupus erythematosus (SLE), litifilimab significantly reduced the mean number of active joints and increased SLE Responder Index-4 (SRI-4) response rates vs placebo at Week 24. TOPAZ-1 (NCT04895241) and TOPAZ-2 (NCT04961567) are ongoing Phase 3 studies evaluating the efficacy and safety of litifilimab vs placebo over 52 weeks in patients with active SLE receiving standard of care. Here, we highlight Latin American (LATAM) cohort data from TOPAZ-1/-2, including baseline characteristics and demographics.

Materials and Methods: TOPAZ-1/-2 have enrolled 548 and 561 participants, respectively, across North America (USA, Canada, Puerto Rico n=158), LATAM (Argentina, Brazil, Chile, Colombia, Mexico, Peru; n=481), Asia Pacific (n=190), and Europe (n=280).

Results: Of the 1,109 participants, most were female (92.6%), with a mean age of 40.6 years in LATAM, 42.9 in TOPAZ-1, and 42.2 in TOPAZ-2. Ethnicity in LATAM was predominantly 'Hispanic or Latino' (97.7%), vs 46.4% and 46.0% in TOPAZ-1 and TOPAZ-2, respectively. Disease duration and active joint counts (tender and swollen joints) were similar across cohorts, with a median (IQR) disease duration of 7.4 (2.9–12.4) years and mean (SD) active joint count of 9.4 (5.2) in LATAM. Ongoing cutaneous lupus erythematosus (CLE) was reported in similar proportions of participants from LATAM (83.5%), TOPAZ-1 (83.9%), and TOPAZ-2 (78.1%); a CLE Disease Area and Severity Index–Activity (CLASI-A) score ≥10 was observed in 17.3%, 21.0%, and 16.6% of participants, respectively. SLE Disease Activity Index–2000 (SLEDAI-2K) scores ≥10 were reported in 57.4%, 57.3%, and 56.1% of participants, respectively. Among participants with available British Isles Lupus Assessment Group-2004 (BILAG-2004), the most common organ domains with Grade A or B severity were musculoskeletal (98.1%, 96.9%, and 92.2%) and mucocutaneous (78.8%, 78.8%, and 77.0%) in LATAM, TOPAZ-1, and TOPAZ-2, respectively.

Conclusion: The TOPAZ-1/-2 studies have enrolled a multinational and geographically diverse population, with notable LATAM representation, enabling a comprehensive and robust evaluation of litifilimab in patients with active SLE.

Funding: Biogen

PT.12

RISK OF TUBERCULOSIS IN IMMUNE-MEDIATED INFLAMMATORY DISEASES PATIENTS UNDER TREATMENT WITH BIOLOGIC AND TARGETED SYNTHETIC DISEASE-MODIFYING ANTI-RHEUMATIC DRUGS: A SYSTEMATIC REVIEW AND META-ANALYSIS OF COHORTS AND RANDOMIZED CONTROLLED TRIALS

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Introduction: Immune-mediated inflammatory diseases (IMIDs) are heterogeneous chronic conditions affecting multiple organs, with 67.6 million new cases annually and a prevalence of 8.3% in Brazil.(1–3) Early diagnosis and proper treatment are essential to prevent progression, disability, and mortality.(4–6) Advances in immunology enabled the development of DMARDs targeting specific inflammatory pathways, including bDMARDs that act on cytokines, interleukins, and B/T lymphocytes, and tsDMARDs that modulate intracellular signaling such as JAK and PDE4.(4) The risk of serious infections remains a major concern, particularly tuberculosis (TB), which has high mortality and major clinical impact in high-burden countries.(7–9,13) Identifying and treating TB infection (TBI) before immunosuppression is crucial to prevent active TB disease (TBD). The risk varies by mechanism of action: anti-TNFα agents show a well-established association with increased TB risk, while evidence for other bDMARDs and tsDMARDs remains inconsistent.(7,14) Guidelines recommend TBI screening before biological or small-molecule therapy, but uncertainties persist regarding optimal frequency and test accuracy under immunosuppression, highlighting the need for stronger evidence.(15–17)
Objective: This systematic review and meta-analysis evaluated the risk of tuberculosis (TB) in patients with immune-mediated inflammatory diseases (IMIDs) treated with biologic disease-modifying antirheumatic drugs (bDMARDs) or targeted synthetic DMARDs (tsDMARDs).
Methods: A comprehensive literature search was conducted in major databases up to February 2025. Randomized controlled trials (RCTs) and cohort studies comparing the risk of TB in adults with IMIDs treated with bDMARDs or tsDMARDs versus controls were included. Meta-analyses were performed using the DerSimonian and Laird random-effects model to estimate the relative risk (RR) of TB in the intervention groups compared with controls.
Results: A total of 335 studies (277 RCTs and 58 cohorts) were included, involving 585,307 patients, of whom 2,614 developed TB in the intervention groups. Among TNFα inhibitors, adalimumab (RR: 1.23 in RCTs; 1.36 in cohorts) and infliximab (RR: 1.44; RR: 2.29) were associated with increased TB risk, while etanercept showed reduced risk (RR: 0.87; 0.75). Divergent results were observed between RCTs and cohorts for certolizumab (RR: 0.89 vs. 2.13) and golimumab (RR: 0.68 vs. 1.24). Among cytokine inhibitors, tocilizumab (RR: 0.88; 0.83), guselkumab (RR: 0.53), risankizumab (RR: 0.51), ixekizumab (RR: 0.74), and secukinumab (RR: 0.35) showed reduced TB risk, while ustekinumab showed conflicting findings between RCTs and cohorts (RR: 0.53 vs. 1.48). Abatacept (RR: 0.42; 0.73) and rituximab (RR: 0.83; 0.55) were also associated with reduced TB risk, whereas anifrolumab was associated with increased risk

(RR: 1.07). Among tsDMARDs, baricitinib (RR: 0.74 vs. 1.92) and tofacitinib (RR: 0.58 vs. 2.22) showed conflicting results between RCTs and cohorts, while upadacitinib was associated with reduced risk (RR: 0.51). According to the GRADE methodology, the certainty of evidence was rated as low for RCTs and very low for cohorts.
Conclusion: Despite limitations, this review identified relevant differences in TB risk across bDMARDs and tsDMARDs, underscoring the importance of individualized treatment selection, particularly in high TB burden regions. The findings also highlight the need for robust real-world studies to strengthen the certainty of evidence.

PT.13

RESPIRATORY MUSCLE STRENGTH AND 6-MINUTE WALK DISTANCE IN PATIENTS WITH SYSTEMIC SCLEROSIS

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Introduction: In patients with systemic sclerosis (SSc), global functional capacity is determined by the extent of multisystem involvement, particularly affecting the pulmonary, cardiac, and musculoskeletal systems. The 6-minute walk test (6MWT) is a well-established, standardized measure of submaximal exercise capacity that reflects the integrated responses of the cardiovascular, respiratory, and peripheral musculoskeletal systems, thereby providing a reliable estimate of functional status. Compared with maximal cardiopulmonary exercise testing, the 6MWT offers a submaximal, externally paced assessment that more closely reflects real-world functional performance and daily physical demands. Maximal inspiratory pressure (MIP) and maximal expiratory pressure (MEP) are indicators of respiratory muscle strength, including diaphragmatic function, and may impact exercise performance assessed by the 6MWT.
Objectives: To evaluate the association between respiratory muscle strength (MIP/MEP) and functional capacity measured by the distance (6MWD) in patients with SSc.
Methods: This cross-sectional study included patients with SSc under regular follow-up at a tertiary care center. The 6MWD was obtained using the standardized 6MWT. Respiratory muscle strength was assessed by MIP and MEP using a digital manovacuometer and expressed in cmH_2O. Data are presented as mean ± SD or median (IQR), as appropriate. The Mann–Whitney test was used for non-normally distributed variables. Partial Spearman correlation adjusted for sex and body mass index (BMI) was performed. p-value < 0.05 was considered statistically significant.
Results: A total of 141 patients were included, with a mean age of 50.3 ± 11.4 years, and the majority were female (80%). The median (IQR) distance walked in the 6MWD was 426 (89) meters, indicating a moderate level of functional capacity in this population. Male patients demonstrated significantly greater respiratory muscle strength compared to females, as evidenced by enhanced MIP (−90 [37] vs. −65 [39]; $p = 0.025$) and MEP (72 [25] vs. 48 [33]; $p < 0.001$) performance. Correlation analysis showed that worse MIP was associated with shorter 6MWD ($r = −0.303$), whereas greater MEP was associated with longer walking distance ($r = 0.235$) independent of sex or BMI.
Conclusion: Functional exercise capacity in patients with SSc may be influenced by multiple factors, including respiratory muscle weakness. However, the findings suggest that respiratory muscle strength has a limited influence on functional exercise capacity as measured by the 6MWD in this sample. Further prospective studies are needed to better clarify this relationship and to support the development of targeted interventions aimed at improving daily physical demands in this population.
References:
Silveira BMF et al. Respir Care 28;69(7):881-890, 2024.
Vandecasteele E et al. Int J Cardiol. 1; 212:265, 2016.

PT.14

MORTALITY FROM RHEUMATOID ARTHRITIS IN BRAZIL DURING AND AFTER THE COVID-19 PANDEMIC (2019–2024): INFLUENCE OF SOCIODEMOGRAPHIC FACTORS

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Introduction
Rheumatoid arthritis (RA) has been associated with an increased risk of COVID-19 infection, hospitalization, and mortality. Comorbidities and older age contribute to worse outcomes. Disruptions in chronic disease care during the pandemic, as well as socioeconomic and healthcare access inequalities, may have impacted mortality.

Objectives
To analyze RA-related mortality during and after the COVID-19 pandemic and temporal trends according to sociodemographic factors in Brazil, 2019–2024.

Materials and Methods
An ecological study using data from the Mortality Information System. Deaths registered in Brazil between 2019 and 2024 with mention of RA as the underlying or associated cause (ICD-10 M05–M06) were included. Absolute and relative frequencies, crude mortality rates (CMR) per 1,000,000 inhabitants, and percentage changes were calculated. Analyses were stratified by sex, age group, and macro-region. Temporal trends were assessed using polynomial regression with semiannual data.

Results
A total of 11,864 deaths with mention of RA were recorded (0.1% of 9,281,165). The national CMR increased from 7.47 to 8.95 (+19.7%), showing a rising parabolic trend (R^2=0.82). An initial peak was observed in 2020–2021, followed by additional peaks in 2022, particularly among women, older adults, and in the South and Southeast regions, while men showed a more stable trend. Mortality did not return to pre-pandemic baseline levels. Women accounted for 77.9% of deaths, with higher mean CMR (14.13 vs. 4.25) and a greater increase over time (+20.64% vs. +16.19%) compared to men. The Southeast accounted for 50.6% of deaths, while the South had the highest rates (15.45) and consistent trend (R^2=0.73). The North showed the highest relative increase (+40.8%). Mortality increased with age, peaking in ≥70 years (CMR 74.31; R^2=0.85), while younger groups showed reductions in CMR (15–29 years: −34.75%; 30–39 years: −11.48%).

Conclusion
RA mortality increased during the pandemic, followed by a decline but without returning to pre-pandemic levels. The temporal pattern suggests that excess mortality was not solely due to direct viral infection but also to complications, disruptions in care, and suboptimal management of comorbidities. Higher

susceptibility was observed among older adults, women, and populations with limited access to specialized care. These findings highlight the need to ensure continuity of care to mitigate risks in vulnerable populations during future health emergencies.

PT.15

MORTALITY FROM RHEUMATOID ARTHRITIS IN BRAZIL: TRENDS AND SOCIODEMOGRAPHIC INEQUALITIES OVER 25 YEARS (2000–2024)

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Introduction

Rheumatoid arthritis (RA) is a chronic systemic inflammatory disease, more common in women and with increasing prevalence with age. In recent decades, early diagnosis and the use of disease-modifying drugs have contributed to a reduction in mortality in different populations. In Brazil, RA epidemiology remains poorly characterized at the national level. Regional inequalities in healthcare access and sociodemographic heterogeneity may influence mortality patterns.

Objectives

To describe RA mortality, temporal trends, and differences according to sociodemographic factors in Brazil from 2000 to 2024.

Materials and Methods

An ecological study using data from the Mortality Information System (SIM). Deaths registered in Brazil between 2000 and 2024 with RA listed as an underlying or associated cause (ICD-10 M05–M06) were included. Absolute and relative frequencies, crude mortality rates (CMR) per 1,000,000 inhabitants, and percentage changes were calculated. Analyses were stratified by sex, age group, and macroregion. Temporal trends were assessed using polynomial regression with annual data.

Results

A total of 32,839 deaths with mention of RA were identified (0.1% of 30,594,455), concentrated in the Southeast (51.9%, 17,049), among women (76.9%, 25,247), and in individuals aged ≥70 years (50.6%, 16,583). The proportion of deaths mentioning RA increased by 43.2%, with greater growth in the Northeast (+64.8%) and Midwest (+76.4%).

RA CMR increased from 4.71 to 8.95 per 1,000,000 (+90.2%), exceeding the increase in the general population (+32.9%). Growth was more pronounced in the Midwest (+145.3%), Northeast (+144.4%), and North (+117.1%), as well as in women (+93.5%), with a non-linear pattern.

CMR remained higher in women (7.09 to 13.73) than in men (2.22 to 3.94). The South consistently showed the highest rates (8.08 to 15.56), followed by the Southeast (6.11 to 10.53), while the North (1.95 to 4.23) and the Northeast (1.78 to 4.34) had lower values. CMR increased with age, peaking at ≥70 years (58.26 to 68.00), with more consistent trends in older groups, whereas individuals aged 15–39 years had lower rates and greater variability.

Conclusion

RA mortality increased significantly and non-linearly in Brazil, with regional disparities. While the South and Southeast maintained higher rates, growth was more pronounced in the North and Northeast. Mortality had a greater impact on women and

older individuals, with more consistent trends in these groups.

PT.16

PHARMACOECONOMIC IMPACT OF RHEUMATOID ARTHRITIS TREATMENT IN A TERTIARY OUTPATIENT CLINIC

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Introduction: Rheumatoid arthritis (RA) is a chronic, systemic autoimmune disease associated with progressive joint damage, functional disability, and increased mortality. Its prevalence ranges from 0.5% to 1% worldwide, with significant impact on public health systems. The introduction of disease-modifying antirheumatic drugs (DMARDs), particularly biologic agents, has revolutionized disease control and patient outcomes. However, these therapies are associated with substantially higher costs, raising concerns regarding their sustainability within publicly funded healthcare systems, especially in middle-income countries.

Objectives: To evaluate the pharmacoeconomic impact of RA treatment and analyze cost distribution according to therapeutic strategies, as well as to explore potential clinical and epidemiological factors associated with the use of high-cost therapies.

Materials and Methods: A cross-sectional study was conducted through retrospective analysis of medical records of patients diagnosed with RA followed at a tertiary outpatient clinic. Data regarding demographic characteristics, disease duration, smoking history, and pharmacological treatment were collected. Patients were categorized according to therapeutic regimen, including biologic and non-biologic DMARDs. Direct monthly costs were estimated using standardized drug pricing, and comparative analyses between groups were performed.

Results: A total of 103 patients were included. Among them, 28 (27.2%) were treated with biologic therapies and 59 (57.3%) with non-biologic DMARDs. Despite representing a minority, patients using biologics accounted for the majority of total expenditures. The estimated total monthly cost for biologic therapies was R$171,198.64, with a mean cost per patient of R$6,114.24, whereas non-biologic therapies accounted for R$26,334.32, with a mean cost per patient of R$446.34. Patients exposed to smoking had a higher likelihood of requiring biologic therapy (OR = 2.06). No significant differences in age distribution were observed between treatment groups, reducing potential selection bias.

Conclusion: Biologic therapies represent a disproportionate share of RA-related healthcare costs. These findings highlight the economic burden associated with advanced disease stages and suggest that delayed diagnosis and treatment initiation may contribute to increased reliance on high-cost therapies. Public health strategies focused on early diagnosis, timely initiation of conventional DMARDs, and risk factor modification may reduce disease progression, optimize resource allocation, and improve long-term sustainability of healthcare systems.

PT.17

Análise de Custos da Nefrite Lúpica no Sistema Único de Saúde do Estado de São Paulo: O Impacto da Terapia Dialítica.

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Introdução: A nefrite lúpica (NL) é uma das manifestações do lúpus eritematoso sistêmico (LES) mais graves, gerando alto consumo de recursos de saúde e comprometendo a qualidade de vida dos pacientes.

Objetivos: Estimar o custo total direto e o custo médio direto associado ao tratamento de NF e comparar a média do custo do tratamento de NL entre pacientes que realizaram diálise e pacientes que não realizaram na perspectiva do SUS no estado de São Paulo (SP) em 2023.

Materiais e Métodos: Este é um estudo retrospectivo e descritivo com base nos dados do Sistema de Atendimentos Ambulatoriais do Sistema Único de Saúde (SIA-SUS) do Departamento de Informática do SUS (DATASUS). Foram incluídos os seguintes registros: 1) diagnóstico de LES (Classificação Internacional de Doenças, 10ª Revisão - M32); 2) registro de atendimento de LES prévio; 3) >18 anos; 4) registros de procedimentos renais (diálise, uso de medicamentos para doença renal, atendimentos com nefrologista e biópsias renais); 5) residentes e atendidos em estabelecimentos de SP em 2023. Para avaliar os custos com o tratamento de NL, os procedimentos incluídos foram categorizados em diálise, biópsia e tratamento medicamentoso (micofenolato de mofetil/sódio (MMF), azatioprina, ciclofosfamida, tacrolimus, ciclosporina, rituximabe ou outros medicamentos usados no tratamento de doença renal). Para avaliar os custos dos medicamentos não disponíveis na base do SIA-SUS foram obtidas as médias dos preçosdo Painel de Preços da Saúde, referentes a 2023, 2024 ou a média de preço mais recente disponível. A análise dos custos considerou a frequências absoluta, relativa e a média.

Resultados: Identificaram-se 5.295 pacientes com NL (85,2% mulheres; 65,7% brancos; 62,3% entre 18–50 anos). Vinte e um pacientes (0,4%) registraram biópsia renal no ambiente ambulatorial (custo total: R$3.981,61). O MMF foi o medicamento mais utilizado (48,3%; custo: R$8.074.404,22), seguido pela azatioprina (11,0%; R$145.564,34). O rituximabe, utilizado por 1,3%, representou o segundo maior custo medicamentoso (R$771.644,88). O custo médio anual por paciente dialítico (7,2% da coorte) foi de R$34.583,84, valor 7,5 vezes superior à média dos pacientes não-dialíticos (R$4.613,34).

Conclusão: Neste estudo 7,2% dos pacientes com NL encontravam-se em tratamento dialítico com um custo médio 7,5 vezes superior ao de pacientes em tratamento não-dialítico. Os dados reforçam a urgência de estratégias de diagnóstico precoce e acesso a terapias imunossupressoras eficazes que retardem a progressão para a doença renal terminal, promovendo tanto a sustentabilidade do sistema de saúde quanto a preservação da qualidade de vida do paciente.

PT.18

Barreiras Geográficas e Carga de Deslocamento no Cuidado da Nefrite Lúpica no Estado de São Paulo em 2023

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Introdução: O manejo da Nefrite Lúpica (NL) exige intervenções frequentes, como sessões de diálise, retirada de medicamentos e monitoramento laboratorial, o que torna o acesso geográfico ao Sistema Único de Saúde (SUS) um determinante crítico do prognóstico. Barreiras de distância e tempo podem comprometer a adesão ao tratamento especializado, em especial o da doença renal crônica, bem como no desfecho clínico.

Objetivo: Quantificar o deslocamento (distância e tempo) de pacientes adultos (≥ 18 anos) com NL para a realização de procedimentos ambulatoriais essenciais mínimos, no estado de São Paulo (SP), durante o ano de 2023.

Materiais e Métodos: Estudo observacional retrospectivo fundamentado em dados de Produção Ambulatorial do Sistema Único de Saúde (SIA/SUS) do Departamento de Informática do SUS (DATASUS) e do Cadastro Nacional de Endereços para Fins Estatísticos (CNEFE/IBGE). Pacientes com NL foram identificados a partir da definição de critérios de inclusão que exigiam a presença concomitante, via identificador criptografado do Cartão Nacional de Saúde, do diagnóstico de Lúpus Eritematoso Sistêmico (LES) (Classificação Internacional de Doenças, 10ª Revisão - M32) e de registros de procedimentos renais específicos, conforme o Protocolo Clínico e Diretrizes Terapêuticas do LES. Analisou-se o deslocamento para diálise, dispensação de micofenolato de mofetil/sódio e biópsias renais. As métricas de distância e tempo (ida e volta) foram estimadas por geoprocessamento via OpenStreetMap. Foram excluídos registros com Código de Endereçamento Postal (CEP) inválido ou sem deslocamento aparente. As análises foram conduzidas no software R, com dados reportados em proporções e medianas [Intervalo Interquartil (IIQ)].

Resultados: Foram incluídos 2.560 pacientes (diálise: n=342; micofenolato: n=2.245; biópsia: n=10) com registros válidos para a análise de deslocamento, totalizando 2.621 rotas para 142 estabelecimentos de saúde. A necessidade de deslocamento intermunicipal ocorreu em 35,4% dos casos de diálise, 43% de micofenolato e 40% de biópsias. O deslocamento mediano (ida e volta) foi menor para diálise (21,2 km [IIQ: 43,2]; 30 min [IIQ: 43]), seguido por micofenolato (41,7 km [IIQ: 46,2]; 56 min [IIQ: 42]) e biópsia renal (61,3 km [IIQ: 56,9]; 74 min [IIQ: 36]). Apesar da menor distância unitária, a diálise gerou a maior carga sobre o sistema de saúde e o paciente, com 35.646 visitas (média de 104,2 sessões/paciente/ano), totalizando, para o conjunto de todas as 35.646 visitas/sessões, uma carga acumulada ao sistema de 1.415.728 km percorridos e 26.343 horas de deslocamento em 2023.

Conclusão: O estudo evidencia barreiras geográficas no tratamento da Nefrite Lúpica no estado de SP, com quase metade dos pacientes necessitando de deslocamento intermunicipal. Embora o acesso à diálise seja geograficamente

mais próximo, a alta frequência das sessões impõe uma carga logística e econômica alta ao sistema e aos pacientes. Os dados sugerem a necessidade de descentralização de centros de dispensação de medicamentos e de tratamento. Políticas de suporte ao transporte e a interiorização de serviços especializados são essenciais para garantir a equidade no cuidado à NL.

PT.19

Perfil Epidemiológico e Progressão Clínica do Lupus Eritematoso Sistêmico e da Nefrite Lúpica, no Estado de São Paulo

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Introdução: O Lúpus Eritematoso Sistêmico (LES) apresenta manifestações heterogêneas, sendo a Nefrite Lúpica (NL) uma das complicações de maior morbidade. Compreender a trajetória do paciente no sistema público é essencial para identificar gargalos assistenciais.

Objetivo: Caracterizar o perfil epidemiológico e sociodemográfico de pacientes com LES e nefrite lúpica (NF) registrados no Sistema Único de Saúde (SUS) no estado de São Paulo (SP), Brasil, bem como analisar sua progressão clínica longitudinal, padrões de tratamento e desfechos clínicos.

Materiais e Métodos: Este estudo de coorte observacional e retrospectivo utilizou registros administrativos ambulatoriais do Departamento de Informática do SUS (SIA-SUS/DATASUS) entre 2008 e 2024.Foram incluídos pacientes do estado de São Paulo com primeiro registro de tratamento entre 2012 e 2024 (período 2008–2011 utilizado para limpeza de casos prevalentes). A coorte de LES foi definida pelo CID-10 (Classificação Internacional de Doenças, 10ª Revisão) M32 - Lúpus eritematoso disseminado/sistêmico. A subpopulação de NL foi identificada por critérios hierárquicos: (1) procedimento nefrológico primário (definido por um código CID-10 específico para doenças renais - N00-N19), dispensação de micofenolato de mofetil/sódio, registro em banco de dados de nefrologia, ou biópsia/transplante renal); (2) dois ou mais atendimentos especializados em nefrologia; ou (3) um atendimento nefrológico associado à dispensação de rituximabe, ciclosporina, ciclofosfamida ou azatioprina.

Resultados: Foram identificados 45.811 pacientes com LES no estado de SP; (88,3%) mulheres, 63,0% entre 30 e 59 anos, 59,9% brancos. Destes, 7.429 pacientes (16,2%) preencheram os critérios para NL. Em relação ao tratamento clínico dos pacientes com NL, predominaram o micofenolato (59,67%) e a azatioprina (29,86%). Por outro lado, a metilprednisolona (0,65%) e a ciclofosfamida (1,02%) representaram uma proporção marginal das dispensações. Além disso, apenas 8,13% da coorte de NL foi submetida a biópsia renal. Por fim, 13,34% dos pacientes necessitaram de diálise, dos quais 52% iniciaram o tratamento antes do seu primeiro registro de atendimento com CID-10 M32, com um tempo mediano de 31 dias prévios a esse primeiro atendimento.

Conclusão: Estes achados fornecem percepções valiosas sobre o perfil clínico de pacientes com NL, particularmente em relação à distribuição das terapias imunossupressoras. Adicionalmente, os dados revelam possíveis lacunas diagnósticas e progressão clínica grave; a maioria dos pacientes em diálise iniciou o tratamento antes do seu primeiro atendimento por LES, e apenas uma minoria foi submetida a biópsia renal. Apoiado pelos dados epidemiológicos, este estudo destaca possíveis lacunas terapêuticas e serve como base de evidências para apoiar políticas de saúde pública e aprimorar o cuidado ao paciente.

PT.20

Anti-MPO in idiopathic pulmonary fibrosis: prevalence and progression to ANCA-associated vasculitis – a systematic review and meta-analysis

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Keywords: Idiopathic pulmonary fibrosis; ANCA-associated vasculitis; Anti-myeloperoxidase; Usual interstitial pneumonia; Microscopic polyangiitis.

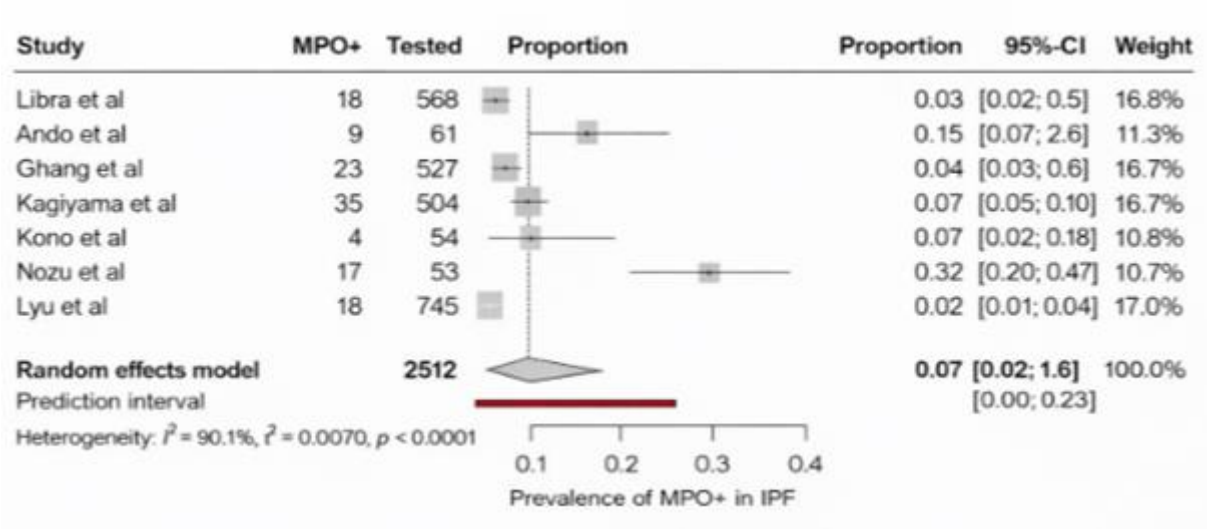
Background: ANCA-associated vasculitides, particularly microscopic polyangiitis (MPA), are classically linked to diffuse alveolar hemorrhage but may also present as interstitial lung disease, most often with a usual interstitial pneumonia (UIP) pattern. This phenotypic overlap between vasculitis-associated UIP and idiopathic pulmonary fibrosis (IPF) raises questions regarding the presence of underlying autoimmunity in patients initially classified as IPF.

Objectives: To determine the prevalence of anti-myeloperoxidase (anti-MPO) antibodies and to assess the risk of progression to MPA in patients initially diagnosed with IPF.

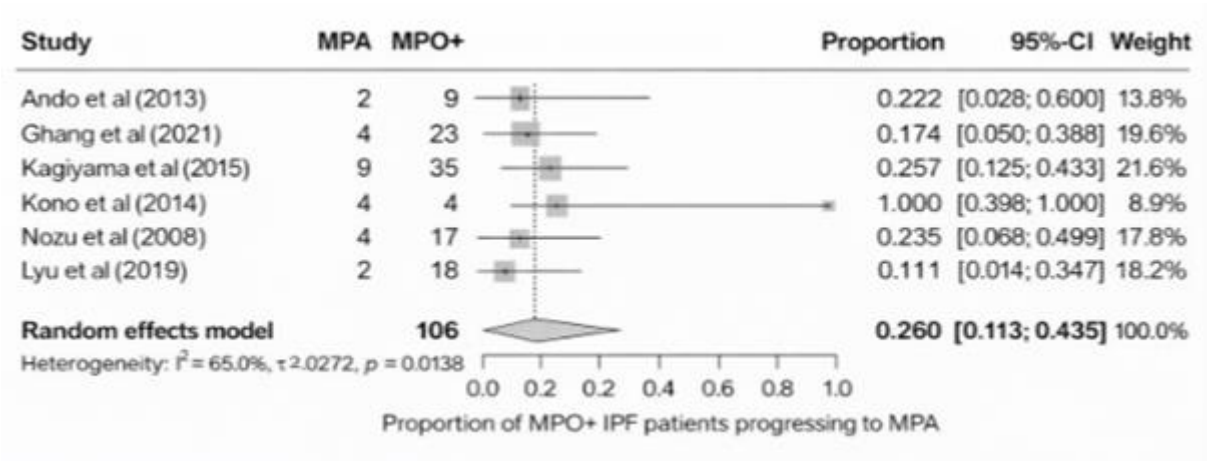
Methods: This was a specific analysis derived from a systematic review and meta-analysis that investigated the presence of Sjögren's disease, inflammatory myopathies, and ANCA-associated vasculitis in patients initially diagnosed with IPF, with a protocol previously registered in PROSPERO (CRD420251161419). A systematic search was performed in the Cochrane Library, PubMed, Embase, Web of Science, and Scopus databases for observational studies (cross-sectional and cohort) in adults with a confirmed diagnosis of IPF. Meta-analyses with a random effects model were conducted when applicable, with heterogeneity assessed using the I^2 index. The risk of bias was assessed using the Joanna Briggs Institute tool, and the certainty of evidence was assessed using the GRADE system.

Results: Seven studies were included. The pooled prevalence of ANCA was 9% (95% CI: 1%–25%; $I^2 = 94.7\%$), and 7% for anti-MPO (95% CI: 2%–16%; $I^2 = 90.1\%$) (Table 1). Among anti-MPO–positive patients, progression from IPF to MPA occurred in 26% (95% CI: 11.3%–43.5%; $I^2 = 65\%$) (Table 2). Sensitivity analysis excluding the study by Kono et al. yielded a pooled prevalence of 20% (95% CI: 12.3%–28.9%) with no residual heterogeneity ($I^2 = 0\%$).

Conclusions: Approximately 7% of patients initially diagnosed with IPF tested positive for anti-MPO antibodies, with progression to MPA observed in 26% of cases. These findings suggest that anti-MPO testing should be considered in the evaluation of patients with IPF, along with the longitudinal follow-up of those who test positive for anti-MPO antibodies.



Graph 1: Forest plot of anti-myeloperoxidase (anti-MPO) prevalence in patients initially diagnosed with idiopathic pulmonary fibrosis (IPF).



Graph 2: Forest plot of progression from idiopathic pulmonary fibrosis (IPF) with anti-myeloperoxidase (anti-MPO) positivity to microscopic polyangiitis (MPA).

PT.21

CONFIABILIDADE INTRA-AVALIADOR, ERRO PADRÃO DA MEDIDA E MÍNIMA MUDANÇA DETECTÁVEL DO TESTE DE 9 PINOS PARA MULHERES COM OSTEOARTRITE DE MÃO: RESULTADOS PRELIMINARES

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Introdução: Osteoartrite de Mão (OAM) é uma condição reumatológica comum, progressiva e limitante que afeta principalmente mulheres acima de quarenta anos. A OAM é caracterizada pela dor intermitente, redução da amplitude de movimento, edema articular e fraqueza nas mãos e punhos. Estes sintomas promovem redução na destreza manual de mulheres com OAM. A destreza manual pode ser definida como a coordenação voluntária do membro superior, com o objetivo de completar uma tarefa de forma precisa, rápida e adaptativa aos desafios do ambiente, sendo diretamente relacionada com a execução de atividades de vida diária e com a qualidade de vida de mulheres com OAM. Apesar do teste de nove pinos (NHPT) ser considerado padrão-ouro para avaliação clínica da destreza manual, até o presente momento não foram conduzidos estudos que investigassem a confiabilidade intra-avaliador desse teste em pacientes com OAM.
Objetivo: Investigar a confiabilidade intra-avaliador, o erro-padrão da medida (EPM) e a mínima mudança detectável (MMD) para mulheres com OAM.
Materiais e Métodos: Foram incluídos no presente estudo mulheres com OAM, acima de 40 anos de idade. As participantes tiveram a destreza manual avaliadas pelo NHPT. Foram realizados dois momentos de avaliação, separados por 7 a 14 dias. As avaliações foram conduzidas por um fisioterapeuta com três anos de experiência no atendimento de pessoas com OAM. Para participantes com OAM bilateral, foi considerada a mão mais comprometida, segundo a percepção da participante. A confiabilidade intra-avaliador foi avaliada pelo coeficiente de correlação intraclasse (CCI) com definição de consistência e uso do modelo *two way mixed effects* (CCI (2,1)). O EPM e a MMD foram obtidas a partir dos valores de CCI.
Resultados: Participaram do presente estudo 16 mulheres com OAM (62 ± 9,92 anos de idade). 56,25% das participantes (n=9) apresentaram OAM bilateral, e 62.5% (n=10) apresentaram comprometimento na mão dominante. Confiabilidade intra-avaliadores apresentou confiabilidade moderada (CCI(2,1): 0,677; IC95% 0,290–0,874). EPM foi igual a 1,793 segundos e a MMD foi igual a 4,97 segundos.
Conclusão: O NHPT é um teste confiável para avaliar a destreza manual de mulheres com OAM. Contudo, os dados devem ser extrapolados com cuidado para outras populações. Destaca-se ainda que estudos futuros são necessários para investigar a confiabilidade em tamanhos amostrais maiores, assim como investigar as outras propriedades clinimétricas do teste.
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PT.22

CORRELAÇÃO ENTRE FORÇA DE PREENSÃO PALMAR, FORÇA DE PREENSÃO EM PINÇA E A DESTREZA MANUAL DE MULHERES COM OSTEOARTRITE DE POLEGAR: RESULTADOS PRELIMINARES

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Introdução: A Osteoartrite (OA) de Polegar é uma das condições mais limitantes que afetam as mãos de mulheres adultas. Dentre os comprometimentos causados pela OAM, destaca-se o prejuízo na destreza manual, ou seja, redução da velocidade e da precisão para realizar tarefas manipulativas. Sabe-se que em indivíduos saudáveis, existe uma correlação moderada a forte entre a força de preensão palmar e testes de destreza manual, especialmente com o Nine Holes Peg Test. Contudo, até o presente momento, a literatura carece de investigações específicas para a OA de Polegar. **Objetivos:** Investigar a relação entre a força de preensão palmar e de pinças com a destreza manual. **Materiais e Métodos:** Trata-se de um estudo transversal preliminar, derivado de uma análise secundária de um Ensaio Clínico Randomizado Aleatorizado. Foram incluídos indivíduos com OA de polegar, acima de 40 anos, diagnosticados segundo o Colégio Americano de Reumatologia. Em participantes com comprometimento bilateral, foi considerada a mão mais comprometida seguindo o relato da participante. As participantes tiveram a destreza manual avaliada pelo Teste de Nove Pinos (9HPT). Para avaliar a força de preensão manual (HGS), foi utilizado o dinamômetro hidráulico Carci ®. Por sua vez, para avaliar a força de preensão em pinça trípode (TP), pinça lateral (LP) e em Pinça Polpa a Polpa (PG) foi utilizado o dinamômetro hidráulico para pinças Carci ®. Para todas as avaliações de força, foram seguidas as recomendações da Sociedade Americana de Terapia da Mão para determinar o posicionamento e o tempo de descanso entre as repetições. Foram realizadas três tentativas para cada preensão avaliada. Foi considerado o melhor desempenho entre as três tentativas. Foi utilizado o teste de Correlação de Spearman para investigar a correlação entre as variáveis. **Resultados:** Neste estudo preliminar, foram incluídos 16 pacientes com OA de Polegar (60,55 ± 8,05 anos de idade) e 44,4% (n=8) apresentaram comprometimento na mão não dominante. A destreza manual apresentou maior correlação com a HGS (ρ = -0,578, p=0,012) e com a LP (ρ = -0,556. p=0,017). Com as Pinças trípode (ρ = -444, p = 0,066) e polpa a polpa (ρ = -343, p = 0,167) não foram encontradas correlações significativas (p<0,05). **Conclusão**: Mulheres com OA de polegar que apresentam menor força de preensão palmar e de pinça lateral também apresentam pior desempenho de destreza manual, avaliada pelo NHPT. Outros padrões de pinça, mesmo sendo similares a pinça necessária para o NHPT, não apresentaram relações significativas. Estudos futuros, com maior tamanho amostral e maior abrangência de diferentes condições reumatológicas devem ser traçados para investigar a relação entre a força de preensão palmar e de pinça com a destreza manual.

PT.23

Sexual Dysfunction Among Women with Sjögren's Disease: Preliminary Data from a Public Hospital in Brazil

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Background:
Sjögren's disease (SjD) is frequently accompanied by extraglandular manifestations, fatigue, and pain. Female sexual dysfunction (FSD) is notably more prevalent among women with SjD and can significantly compromise quality of life (QoL). Given that sexual health is influenced by cultural and educational contexts, this study aimed to assess the prevalence of FSD and its associated factors in a Brazilian cohort.

Methods:
In this cross-sectional study, clinical and psychological data were collected from female outpatients with SjD at a public hospital. Participants completed a standardized questionnaire and the validated Brazilian version of the Female Sexual Function Index (FSFI), which evaluates six domains: desire, arousal, lubrication, orgasm, satisfaction, and pain.

Results:
Preliminary analysis included 108 women (70% premenopausal, 30% postmenopausal). FSD (FSFI <26.5) was identified in 68 participants (63%), with mean scores indicating moderate dysfunction among premenopausal women (20.65 ± 7,49) and moderate to severe dysfunction among postmenopausal women (11,15 ± 10,82). No significant differences were found in Patient-Reported Index (ESSPRI) or Disease Activity Index (ESSDAI) scores between groups. The mean age was 52 ± 13.15 years, and the mean disease duration was 8.01 ± 6.12 years. Vaginal dryness was the most frequently reported symptom (66.7%), followed by decreased libido (44.4%), difficulties with arousal (36.1%) and lubrication (45.4%), orgasmic disorder (27.4%), decreased sexual satisfaction (81.5%), and dyspareunia (31.5%). Lower FSFI scores were associated with anxiety and depressive symptoms (11.75 ± 12.27 and 13.81 ± 8.79, respectively).

Conclusions:
These preliminary findings highlight a high prevalence of FSD among Brazilian women with SjD. Greater awareness and proactive assessment of sexual health in clinical practice may inform targeted interventions, ultimately enhancing treatment outcomes, quality of life, and patient satisfaction.

Keywords: Sjögren's disease; quality of life; female sexual dysfunction; sexual health assessment.

PT.24

THORACIC CT AS A RELIABLE TOOL FOR DETECTING SARCOPENIA IN TAKAYASU ARTERITIS: EVIDENCE OF DIFFUSE MUSCLE LOSS FROM T10 TO T12

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Introduction

Takayasu arteritis (TA) is a chronic large-vessel inflammatory vasculitis primarily affecting the aorta and its major branches, potentially leading to severe vascular complications. Patients with chronic immune-mediated diseases often experience reduced quality of life, frequently associated with sarcopenia. In this context, the assessment of muscle mass has advanced with the use of standardized imaging techniques. Computed tomography (CT) stands out for enabling precise muscle mass quantification, offering high spatial resolution and lower susceptibility to confounding factors such as fluid retention compared to bioimpedance and dual-energy X-ray absorptiometry (DXA). Moreover, skeletal muscle area (SMA) derived from CT shows strong correlation with total muscle mass.

Objective

To evaluate the prevalence of sarcopenia and its association with muscle composition parameters in patients with TA using CT imaging.

Materials and Methods

Patients with TA who underwent chest CT were included. Skeletal muscle index (SMI), skeletal muscle area (SMA), skeletal muscle fat (SMF), skeletal muscle radiation attenuation (SMRA), and intramuscular adipose tissue (IMAT) were analyzed at vertebral levels T10, T11, and T12 using semi-automated segmentation with SliceOmatic software. Sarcopenia was defined based on SMI at T12 ($\leq$30.6 cm²/m² for women and $\leq$42.6 cm²/m² for men). Statistical significance was set at $p < 0.05$.

Results

Thirty four patients were involved, 31 female and 3 male. The prevalence of sarcopenia was 35% exclusively in female patients. Individuals with sarcopenia showed significantly lower SMA and SMI across all analyzed levels, with the most pronounced differences at T12 (SMI: 25.3 vs 39.3 cm²/m², $p < 0.001$; SMA: 65.5 vs 102.7 cm², $p < 0.001$). SMF was also lower in the sarcopenic group, whereas SMRA alone did not differ between groups. Muscle quality–related parameters, including IMAT and SRMA, were not significantly different. However, at T12, a negative correlation was observed between SRMA and %IMAT, suggesting that poorer muscle quality is associated with greater relative fat infiltration.

Conclusion

Patients with sarcopenia exhibited a marked reduction in muscle mass across all thoracic levels (T10–T12), indicating a diffuse pattern of muscle depletion along the thoracic spine. Quantitative muscle parameters were the most robust discriminators of

the sarcopenic phenotype, while muscle quality assessed by SMRA provided complementary value when interpreted alongside relative intramuscular fat. These findings support thoracic CT as a reliable tool for assessing sarcopenia in patients with Takayasu arteritis.

Takayasu arteritis.KALTENHAUSER, S. et al. Diagnosis of sarcopenia on thoracic computed tomography and its association with postoperative survival after anatomic lung cancer resection. Scientific Reports, v. 13, n. 1, p. 18450, 27 out. 2023.

DERSTINE, B. A. et al. Skeletal muscle cutoff values for sarcopenia diagnosis using T10 to L5 measurements in a healthy US population. Scientific Reports, v. 8, n. 1, 27 jul. 2018.

PT.25

Concomitant Therapy with Ixekizumab Plus Tirzepatide in Adults with Psoriatic Arthritis and Overweight or Obesity Demonstrated Superior Disease Control Compared to Ixekizumab Alone: Results from the Ph3b TOGETHER-PsA Trial

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Introduction: Overweight and obesity occurs in 72-82%[1,2] of patients with psoriatic arthritis (PsA) and is associated with worse clinical outcomes and increased comorbidities[3]. We evaluated efficacy and safety of ixekizumab and tirzepatide (IXE+TZP) compared to ixekizumab in adults with active PsA and overweight (body mass index [BMI]>27-<30 kg/m2) with ≥1 weight-related comorbidity or obesity (BMI≥30 kg/m2).

Type of Study:
TOGETHER-PsA (NCT06588296) is a Phase 3b, randomized, 52-week trial.

Methods: Participants were randomized 1:1 to IXE+TZP or IXE (open-label) using FDA-approved doses. Primary outcome was week 36 simultaneous achievement of ACR50 and ≥10% weight reduction. Key secondaries included ACR50.

Results: Of participants on IXE+TZP (n=138) and IXE (n=133), mean age was 55.0 years, 69.7% were female, BMI was 37.6 kg/m2, 71.6% had psoriasis, and 18.8% had failed ≥2 classes of advanced therapies.
31.7% participants achieved primary outcome with IXE+TZP versus 0.8% for IXE ($p<0.001$). A meaningful difference in ACR50 was observed in IXE+TZP (33.5%) versus IXE alone (20.4%) (multiplicity-controlled $p=0.020$) with a significant improvement ($p<0.05$) seen as early as week 4. Improvements were demonstrated in PASI 75/90/100 for IXE+TZP and IXE alone, with IXE+TZP demonstrating a significant difference in absolute PASI change from baseline ($p<0.01$). Significant improvements were observed in physical function (HAQ-DI; $p<0.001$), FACIT-fatigue ($p<0.01$), SF-36 MCS ($p<0.05$) and PCS ($p<0.001$).
Adverse events (AEs) aligned with established drug profiles. Treatment discontinuations due to AEs were comparable among treatment groups.

Conclusion: Significant comprehensive improvement in disease activity was demonstrated with IXE+TZP compared to IXE alone in active PsA, with no new safety concerns.

References:

1. Eder L, Thavaneswaran A, Chandran V, et al. Obesity is associated with a lower probability of achieving sustained minimal disease activity state among patients with psoriatic arthritis. Ann Rheum Dis. 2015;74(5):813-7.
2. Curtis J, Rodriguez P, Probst J, et al. Quantifying the Obesity-Psoriatic Arthritis Nexus: Prevalence, Incidence, and Comorbidities from 19.9 Million US Patients (2018-2024): pending presentation at RCWS 2026 on 11-24 February 2026 in Maui, Hawaii, USA.
3. Kumthekar A, Ogdie A. Obesity and Psoriatic Arthritis: A Narrative Review. Rheumatol Ther. 2020;7(3):447-56

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PT.26

Disease Burden and Comorbidities in Patients with Psoriatic Arthritis and Concomitant Obesity - A Pooled Analysis of Three Clinical Trials

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Background: The relationship between psoriatic arthritis (PsA) and obesity is complex: obesity can increase the risk of developing PsA, whereas weight loss interventions in patients (pts) with PsA may reduce disease activity and improve treatment response.

Methods: This analysis pooled data from SPIRIT-P1, SPIRIT-P2, and SPIRIT-H2H clinical trials with biologic naive and biologic experienced adults with active PsA. Pt characteristics, disease burden, and comorbidities at baseline (BL) were analyzed across body mass index (BMI, kg/m2) groups: <25 (normal), ≥25-<30 (overweight), and ≥30 (obesity).
The non-parametric Mann-Whitney U test was used to statistically compare differences between BMI groups, with p-value ≤0.05 signaling statistical differences.

Results: Among 1284 pts, 42.6% had a BMI≥30 (obesity). Pts living with obesity had higher mean (standard deviation) tender joint counts (23.0[14.7]), swollen joint counts (12.1[9.2]), disease activity index in PsA (49.1[23.0]), disease activity score 28-CRP (5.1[1.0]), fatigue numeric rating scale score (6.2[2.3]), health assessment questionnaire-disability index score (1.3[0.6]), and 36-Item Short Form Health Survey (SF-36) physical component summary score (34.0[9.0]) compared to the normal group, with statistical significance (p≤0.05). Similar numerical trends observed for overweight group compared to normal group at BL, but without statistical significance. SF-36 mental component summary scores were statistically significant for obesity (46.2[12.3]) and overweight (47.0[11.8]) groups compared to normal group. Current enthesitis diagnosis was higher in obesity (66.2%) and overweight (58.1%) groups compared to the normal group (54.4%).

Pts with higher BMI showed a greater prevalence of comorbidities at BL: cardiovascular disease (obesity 55.4%, overweight 36.0%, normal 18.1%), hypertension (obesity 51.9%, overweight 30.8%, normal 11.4%), hyperlipidemia (obesity 5.5%, overweight 5.0%, normal 1.7%), diabetes (obesity 19.4%, overweight 12.8%, normal 3.4%), and metabolic dysfunction-associated liver disease (obesity 1.5%, overweight 0.7%, normal 0.7%).

Conclusion: Active PsA pts living with obesity/overweight experienced higher disease burden and cardiometabolic burdens like hypertension, hyperlipidemia, diabetes, cardiovascular disease, and metabolic dysfunction-associated liver disease, underscoring unmet healthcare needs. Emerging therapeutic strategies to manage both active PsA and comorbidities offer rheumatologists opportunities to provide holistic care, shifting from disease management to health improvement.

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PT.27

PROGRESSIVE INDUCTION OF ANTINUCLEAR AUTOANTIBODIES IN A COLLAGEN V-INDUCED MURINE MODEL OF SYSTEMIC SCLEROSIS

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Introduction: In the systemic sclerosis (SSc), specific autoantibodies can be related as risk factors for certain organ manifestations, including vascular manifestations and fibrosis. Recently our group described an SSc model, induced in mice by collagen V (COLV) immunization that reproduces skin and pulmonary fibrosis and vascular manifestations. In this study, our purpose was to investigate de presence of antinuclear autoantibodies (ANA) during the IMU-COLV mice model evolution.
Material and Methods: The SSc model was induced in C57BL/6 female mice (n=47) immunized with COLV emulsified in Freund's adjuvant (IMU-COLV). The animals were divided in groups maintained by 15 (n=14), 30 (n=12), 45 (n=11) and 120 (n=10) days. The respective controls groups (n=37) were immunized with Freund's adjuvant and maintained for the same periods. After euthanasia, the peripheral blood of all animals was collected and the sera separated by centrifugation. The slides with Hep-2 cells were employed to evaluate the presence and pattern of ANA in the animal's sera by immunofluorescence microscopy.
Results: The sera analyses from IMU-COLV-15 days did not show the presence of ANA. In contrast, the microscopic analysis of the sera from IMU-COLV-30 ($p=0.0004$), 45 ($p=0.0001$) and 120 ($p<0.0001$) days presented intense fluorescence, in relation to control. The ANA present in these sera were characterized with a dotted cytoplasmic and nuclear pattern (isolated dots), characteristic of autoimmune connective tissue diseases. Furthermore, the frequency of the ANA pattern in the IMU-COLV mice sera was increased with the model progression: 30 days ($p=0.006$), 45 days ($p=0.0002$) and 120 days ($p<0.0001$).
Conclusion: This pilot study showed that the IMU-COLV mice model triggered autoimmunity, with ANA characterized by a dotted cytoplasmic and nuclear pattern (isolated dots). Furthermore, the ANA were more frequent with the model progression. These data suggest IMU-COLV mice model can be a useful tool to evaluate the relation of autoimmunity with other tissue manifestations in SSc.
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PT.28

ANATOMICAL DISTRIBUTION OF UVEITIS IN PSORIASIS WITHOUT ARTHRITIS: A SYSTEMATIC REVIEW

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INTRODUCTION

Psoriasis is a systemic inflammatory disease associated with extra-cutaneous manifestations, including ocular involvement. Uveitis is a relevant complication; however, its anatomical distribution in patients without psoriatic arthritis remains poorly defined. Methodological heterogeneity and diagnostic limitations may influence reported patterns.

OBJECTIVES

To evaluate the anatomical distribution of uveitis in adult patients with psoriasis without arthritis.

MATERIALS AND METHODS

A systematic review was conducted according to PRISMA 2020 guidelines, with protocol registered in PROSPERO (CRD420261360547). A structured search strategy based on predefined eligibility criteria was applied across PubMed/MEDLINE, Embase, Cochrane Library, Ovid and LILACS, combining controlled vocabulary and free-text terms. Studies published in the last 10 years were included, limited to English and Spanish. Reviews, clinical case reports, and studies involving psoriatic arthritis were excluded. Study selection was performed independently by two reviewers. Risk of bias was assessed using the Joanna Briggs Institute (JBI) tool. Statistical analyses were conducted using R software (version 4.2.2). Proportion analyses were performed using a random-effects model with inverse variance weighting and restricted maximum likelihood estimation. Heterogeneity was assessed using the I^2 statistic, with continuity correction (0.5) applied when necessary.

RESULTS

A total of 9,722 records were identified, with 6,805 screened and 13 assessed for eligibility, resulting in 5 studies included.

Anterior uveitis predominated (**83.1%, 95%CI: 82.1–84.0; I^2=0%**). Panuveitis showed intermediate frequency (**10.0%, 95%CI: 3.6–25.0**), while intermediate uveitis was rare (**2.5%, 95%CI: 0.1–33.4**). Posterior uveitis was rarely reported (<5%).

Estimates for intermediate and panuveitis showed wide confidence intervals, indicating substantial imprecision. Heterogeneity was higher for these subtypes, suggesting methodological variability.

Most studies were classified as high risk of bias. Selection bias was frequently high, whereas description bias was consistently low. Measurement and analysis biases were predominantly low, with some concerns, and reporting bias showed notable concerns.

CONCLUSION

Anterior uveitis is the predominant anatomical subtype in patients with psoriasis without arthritis. However, this pattern may be influenced by methodological

limitations and diagnostic bias. Intermediate and posterior forms remain insufficiently characterized. Further prospective studies using standardized criteria and advanced imaging are required.

BIBLIOGRAPHICAL CITATION

Kim BR, et al. J Eur Acad Dermatol Venereol. 2023;37:1336.

PT.29

Which forearm DXA site best reflects radial bone microarchitecture and strength? Insights from HR-pQCT and FEA in healthy women across adulthood

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Background: Forearm assessment by dual-energy X-ray absorptiometry (DXA) has traditionally focused on the 1/3 radius, a predominantly cortical site recommended for diagnostic use in specific clinical settings. However, this region may not adequately reflect distal radial microarchitecture as assessed by three-dimensional imaging methods. In contrast, the ultradistal (UD) radius is relatively enriched in trabecular bone and may be more sensitive to early alterations in bone quality. Although studies using high-resolution peripheral quantitative computed tomography (HR-pQCT) suggest that microstructural deterioration in this region is associated with impaired bone integrity and fracture risk, it remains uncertain which forearm DXA sub-region—UD, 1/3, or total radius—best reflects radial microarchitecture and estimated bone strength.

Objective: To evaluate the associations of UD, 1/3, and total radius areal bone mineral density (aBMD) with radial microarchitectural and mechanical parameters assessed by high-resolution peripheral quantitative computed tomography (HR-pQCT) and finite element analysis (FEA) in healthy women aged 20–80 years.

Methods: In this cross-sectional study, 503 healthy women underwent forearm DXA, axial DXA, radial HR-pQCT, and radial FEA. Primary outcomes were trabecular volumetric BMD (Tb.vBMD), cortical thickness (Ct.Th), and failure load. Main exposures were UD, 1/3, and total radius aBMD. Pearson correlations and multivariable linear regression models adjusted for age, body mass index, menopausal status, and race were performed. Secondary analyses assessed the incremental value of each radial DXA site beyond lumbar spine, femoral neck, and total hip aBMD. Stratified analyses by menopausal status and interaction analyses with age were also performed.

Results: Of the 503 participants, 496 had at least one radial DXA measure available for analysis. UD aBMD showed the strongest correlations with Tb.vBMD ($r=0.614$), Ct.Th ($r=0.595$), and failure load ($r=0.724$). Corresponding correlations for 1/3 radius aBMD were 0.398, 0.369, and 0.500, and for total radius aBMD were 0.521, 0.486, and 0.632. In adjusted models, UD aBMD remained the strongest independent predictor of Tb.vBMD (standardized $\beta=0.548$), Ct.Th ($\beta=0.571$), and failure load ($\beta=0.678$), all $p<0.001$. In incremental analyses, UD aBMD consistently outperformed 1/3 and total radius aBMD in models additionally accounting for lumbar spine, femoral neck, or total hip aBMD, yielding the largest gains in explanatory power for all primary outcomes, with adjusted ΔR^2 values of up to 0.110 for Tb.vBMD, 0.237 for Ct.Th, and 0.199 for failure load. This pattern remained consistent in analyses stratified by menopausal status and in sensitivity analyses restricted to postmenopausal women using time since menopause instead of menopausal status. In exploratory interaction analyses, age did not significantly modify the associations of radial DXA sites with the primary outcomes (all p for interaction >0.05).

Conclusion: In healthy women across adulthood, ultradistal radius aBMD was the forearm DXA measure most strongly associated with radial microarchitecture and

estimated strength assessed by HR-pQCT and FEA. Its superior performance was consistent across menopausal strata and was not modified by age.

PT.30

CARACTERIZAÇÃO CLÍNICA, LABORATORIAL E DE IMAGEM DO COMPROMETIMENTO ARTICULAR NA SÍNDROME ANTIFOSFOLÍPIDE

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Introdução: A síndrome antifosfolípide (SAF) é uma doença autoimune caracterizada por tromboses e morbidade gestacional, em associação à presença de anticorpos antifosfolípides. O sistema músculo-esquelético pode estar acometido nos pacientes com SAF, sendo a artralgia um sintoma comum. Contudo, essas manifestações são pouco exploradas na literatura, especialmente nos achados ultrassonográficos. **Objetivos:** Caracterizar as manifestações clínicas articulares, laboratoriais e radiológicas da síndrome antifosfolípide (SAF) primária e/ou associada ao Lúpus Eritematoso Sistêmico (LES) comparando com controles saudáveis. **Pacientes e Métodos:** Foram selecionados 98 pacientes, de ambos os sexos e com idade entre 18-50 anos, sendo 38 com SAF primária conforme os critérios de Sydney (2006), 26 com SAF secundária ao LES conforme os critérios de Sydney (2006) e critérios de classificação do *American College of Rheumatology*, 1997 e 35 controles pareados por sexo e idade. O estudo foi transversal. Os pacientes foram avaliados quanto à presença de artralgia e suas características, além da realização de radiografias e ultrassonografias (US) de alta resolução das mãos e punhos. Laboratorialmente, foram realizadas as dosagens de proteína C reativa, velocidade de hemossedimentação (VHS), anticorpo anti-peptídeo citrulinado cíclico (anti-CCP) e Fator Reumatoide (FR). Essas variáveis foram comparadas entre três grupos: pacientes com síndrome primária, pacientes com síndrome secundária ao LES e controles saudáveis. **Resultados:** Os pacientes apresentaram idade comparável entre os grupos controle, SAF primária e SAF secundária, com medianas de 34 (28,5 - 44,5), 38 (32,5 - 43,75) e 38 (36 - 43,75) anos, respectivamente (p=0,206). Na análise do perfil de anticorpos antifosfolípides entre SAF primária e SAF secundária, o anticoagulante lúpico foi o mais prevalente em ambos os grupos, sem diferença estatística significativa (94,7% *vs.* 96,2%; p=0,792). A artralgia (80,8% vs. 50%; p=0,013) e a rigidez matinal (46,2% *vs.* 21,1%; p=0,033) foram significativamente mais frequentes na SAF secundária. A VHS foi maior na SAF secundária (mediana de 19,5mm) comparada à SAF primária (14mm) e aos controles (6mm); p<0,001. A positividade do FR IgG foi 2,6% na SAF primária e ausente na secundária e controles, sem diferenças estatísticas entre os grupos e não encontramos positividade de anti-CCP IgG nos grupos. As alterações radiográficas foram discretas e

sem diferenças significativas. Na US, foi observado derrame articular significativamente mais frequente na SAF secundária (26,9% vs. 2,6% vs. 2,9%; p=0,001), enquanto outros achados (calcificações, espessamento do nervo mediano, tenossinovites e sinovites) não diferiram significativamente entre os grupos.
Conclusão: O quadro articular da SAF primária, embora sintomático, não apresentou alterações significativas em relação às análises radiológicas e laboratoriais compatíveis com quadro inflamatório que justifique uso de imunossupressores.

PT.31

ALTERAÇÕES AUDIOMÉTRICAS EM PACIENTES COM VASCULITE ANCA-ASSOCIADA

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Introdução: O acometimento otorrinolaringológico nas vasculites associadas ao ANCA (VAA) é frequente, podendo envolver o ouvido médio e interno e resultar em alterações auditivas que variam desde hipoacusia condutiva até perda auditiva neurossensorial. A identificação precoce dessas manifestações é fundamental, uma vez que podem refletir atividade sistêmica da doença e impactar a qualidade de vida.
A perda auditiva é altamente prevalente na Granulomatose com Poliangiíte (GPA), afetando entre 19% e 93% dos pacientes. Além disso, pode acometer cerca de 5% a 15% dos pacientes com Poliangiite microscópica (PAM) e 10% a 30% dos pacientes com Granulomatose eosinofílica com poliangiite (GEPA), podendo evoluir para dano coclear irreversível.
Objetivos: Correlacionar dados audiométricos em pacientes com VAA, comparando-os a um grupo controle.
Materiais e métodos: Trata-se de um estudo retrospectivo, de corte transversal, no qual foram realizadas audiometrias no setor da fonoaudiologia em pacientes com VAA, independentemente da presença de queixas auditivas, com a inclusão de um grupo controle. Participaram 24 indivíduos: 12 no grupo VAA e 12 no grupo controle, pareados por sexo e com diferença etária de até cinco anos. Ambos os ouvidos foram avaliados. Com base nos resultados da audiometria tonal limiar, a perda auditiva foi classificada em condutiva, neurossensorial ou mista.
Resultados: No grupo VAA, 17% dos pacientes (n=2) apresentaram audiometria sem alterações; 33% (n=4) apresentaram perda auditiva exclusivamente neurossensorial; e 50% (n=6) apresentaram perda auditiva mista e/ou neurossensorial.
No grupo controle, 25% (n=3) apresentaram audiometria sem alterações; 41% (n=5) apresentaram perda auditiva exclusivamente neurossensorial; 17% (n=2) apresentaram perda auditiva mista e neurossensorial; e 17% (n=2) apresentaram perda auditiva do tipo mista.
Dessa forma, 83% do grupo VAA apresentou alterações audiométricas, em comparação a 58% do grupo controle. O teste exato de Fisher demonstrou $p = 0,3707$, evidenciando maior tendência de prevalência no grupo VAA, porém sem significância estatística.
Conclusão: Pacientes com VAA apresentaram maior prevalência de deficiência auditiva em comparação ao grupo controle, sendo a perda auditiva neurossensorial a mais frequente. Apesar disso, a diferença não foi estatisticamente significativa ($p > 0,05$). Novos estudos com maior tamanho amostral são necessários para confirmação desses achados.
A perda auditiva pode constituir uma manifestação precoce das VAA, podendo anteceder outros sintomas. Assim, sua investigação deve ser realizada de forma ativa, com o objetivo de promover diagnóstico precoce e melhorar a qualidade de vida dos pacientes.

PT.32

AVALIAÇÃO DO PERFIL DE FERRO EM PACIENTES COM LÚPUS ERITEMATOSO SISTÊMICO COM E SEM ANEMIA HEMOLÍTICA AUTOIMUNE

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Introdução: Lúpus Eritematoso Sistêmico (LES) é uma doença autoimune com manifestações clínicas heterogêneas e acometimento multissistêmico. As anormalidades hematológicas são comuns nesta doença e frequentemente correlacionam-se com a sua atividade. A anemia encontra-se em cerca de 50% dos casos e tem como principal etiologia a anemia da doença crônica. Ainda com etiologia imune, destaca-se a anemia hemolítica autoimune (AHAI), nela, há ligação de autoanticorpos à superfície dos eritrócitos culminando em hemólise. A principal etiologia não imune é a ferropenia.

Objetivo: Avaliar o perfil de ferro em pacientes com LES com e sem AHAI.

Materiais e Métodos: Foi realizado um estudo transversal, com base em dados de prontuários eletrônicos, período de 01/01/2019 a 31/12/2024. Incluídos pacientes com diagnóstico confirmado de LES, conforme critérios ACR/EULAR 2019 e/ou SLICC 2012, idade maior ou igual a 18 anos, anemia. O diagnóstico de AHAI foi baseado na presença de anemia (hemoglobina < 12g/dl), reticulocitose (> 97.500/mm³), aumento da lactato desidrogenase (LDH) sérica (> 246 U/L) e teste de Coombs Direto positivo. Foram obtidos 2 grupos, compostos por avaliações de anemia em pacientes com AHAI e sem AHAI (sem reticulocitose e Coombs Direto negativo). Variáveis contínuas foram apresentadas por medida central e dispersão; quando tinham distribuição normal, procedemos ao teste t de Student; quando não, ao teste de Mann-Whitney. O valor de $p<0,05$ foi utilizado para significância estatística.

Resultados: O estudo incluiu 74 pacientes, com 167 avaliações de anemia. Houve predominio do sexo feminino (86,5%), etnia branca (62,1%) e a idade mediana foi de 32 anos. O grupo de pacientes com AHAI foi composto por 68 avaliações (40,1%) e o grupo sem AHAI, por 99 (59,9%). A comparação dos exames laboratoriais, respectivamente, dos grupos com AHAI e sem AHAI foi: Hb - 9,0 ± 2 g/dL vs 10,0 ± 2 g/dL, $p<0,01$; Ferro sérico - 52,1 ± 36,4 ng/ml vs 50,6 ± 27,7 ng/ml, $p=0,80$; Ferritina - 566,4 (245,8-1110) ng/ml vs 205,4 (66,4-487,5) ng/ml, $p< 0,01$; TIBC - 206 ± 44,8 µg/dl vs 254 ± 68,5 µg/dl, $p<0,01$; Índice de Saturação de Transferrina (IST) - 25,9 ± 17,1% vs 19,8 ± 11,9%, $p=0,04$; LDH - 335,5 (273-426,7) U/L vs 223 (195,6-276,5) U/L, $p<0,01$; Reticulócitos - 110,2 ± 54,9 10^3/mm³ vs 71,8 ± 33,4 10^3/mm³.

Conclusão: Nossa amostra sugeriu, com base nos perfis de ferro analisados, predomínio de anemia da doença crônica como etiologia principal da anemia no grupo LES sem AHAI, corroborando a literatura vigente. O presente estudo enfatiza a importância da avaliação de outros parâmetros hematológicos nestes

pacientes, tendo em vista a frequência elevada de anemia nos mesmos, e a importância do diagnóstico etiológico de tal manifestação, uma vez que sua patogênese pode ser imune ou não, e, neste caso, necessita de manejo específico.

Referências:

Bathina A, Cureus, 16:e75956, 2024
Giannouli S, Ann Rheum Dis, 66: 144-8, 2007
Barbosa Neto A B, BJIHS, 7: 267-281, 2025
Voulgarelis M, Ann Rheum Dis, 59:217-22, 2000

PT.33

HIGH-IMPACT EVIDENCE IN OBSTETRIC ANTIPHOSPHOLIPID SYNDROME: BRIDGING MECHANISMS, BIOMARKERS, AND CLINICAL PRACTICE

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INTRODUCTION: Obstetric antiphospholipid syndrome (OAPS) is one of the most clinically relevant interfaces between autoimmunity, thrombosis, placental injury, and adverse pregnancy outcomes in rheumatology. Although aspirin-heparin strategies improved prognosis, refractory morbidity, non-criteria manifestations, and uncertainty in risk stratification remain major unmet needs.

OBJECTIVE: To synthesize the highest-impact evidence on pregnancy-associated antiphospholipid syndrome from a Web of Science dataset and identify clinically actionable advances for medical practice.

METHODS: A PRISMA-adapted systematic review was performed using the Web of Science spreadsheet provided in this chat, retrieved with the strategy ("Antiphospholipid Syndrome" OR "Antiphospholipid Antibody Syndrome") AND (pregnancy OR pregnant) AND rheumatology. Among 490 records, 3 duplicates were removed. After title/metadata screening, 94 records were excluded for non-eligible publication types (meeting abstracts, editorials, notes, corrections, and letters). The remaining 393 articles/reviews underwent title/abstract screening, and 73 studies were retained as directly focused on APS and pregnancy. Relevance ranking considered thematic adherence, citation impact, recency, and clinical usefulness for rheumatologists.

RESULTS AND DISCUSSION: The evidence converged into four domains. First, seminal cohorts showed a marked increase in live birth with structured treatment compared with previous untreated pregnancies (Lima, Clin Exp Rheumatol, 14:131, 1996; Huong, J Rheumatol, 28:2025, 2001). Second, mechanistic studies established that OAPS is not purely thrombotic but also inflammatory and placental, involving β2-glycoprotein I, trophoblast dysfunction, and complement-mediated injury (Larosa, J Rheumatol, 21:1684, 1994; Meroni, Nat Rev Rheumatol, 14:433, 2018; Ulrich, Arthritis Rheumatol, 68:730, 2016). Third, registries and cohort studies refined phenotyping and prognosis, highlighting the clinical weight of non-criteria OAPS, triple aPL positivity, and severe maternal complication profiles (Alijotas-Reig, Rheumatology, 59:1306, 2020; Lazzaroni, Front Immunol, 10:1948, 2019; Murarasu, Lancet Rheumatol, 4:e842, 2022). Fourth, therapeutic updates indicate hydroxychloroquine as a promising adjunct for refractory OAPS, although randomized evidence is still limited (Fierro, Rheumatol Int, 44:223, 2024).

CONCLUSION: The highest-relevance literature consistently supports OAPS as a distinct and highly complex rheumatic obstetric disorder, characterized by a multifactorial pathophysiology that integrates thrombotic, inflammatory, and placental mechanisms. This body of evidence underscores the need for a paradigm that goes beyond traditional anticoagulation, emphasizing structured preconception counseling, longitudinal biomarker-informed surveillance, and coordinated multidisciplinary management involving rheumatologists, obstetricians, and maternal–fetal medicine

specialists. Furthermore, emerging data highlight the prognostic value of high-risk serological profiles, particularly triple antiphospholipid antibody positivity, as well as the clinical relevance of non-criteria obstetric manifestations that remain under-recognized in routine practice. In the context of advanced rheumatology, the field is clearly transitioning from empirically driven therapeutic strategies toward a precision-based obstetric immunology framework, integrating individualized risk stratification, targeted adjunctive therapies and closer monitoring of maternal and placental health.

PT.34

BRIDGING THE GAP BETWEEN FIBROMYALGIA, MENOPAUSE, AND SARCOPENIA: A PRISMA-BASED SYSTEMATIC REVIEW OF UNMET NEED IN RHEUMATOLOGY

Lavareda PHB, Laissa NBS, Fernandes ES, Silva TF

Introduction: Fibromyalgia is highly prevalent in women and often worsens during the menopausal transition, when estrogen decline, sleep disruption, mood symptoms, and loss of muscle mass may amplify central sensitization and functional disability. Sarcopenia and probable sarcopenic obesity are also increasingly recognized in postmenopausal women, but the extent to which these constructs overlap in rheumatology remains unclear.
Objective: This study aims to systematically review the literature on the relationship between fibromyalgia, climacteric and sarcopenia, emphasizing clinically relevant evidence for rheumatology.
Methodology: A systematic review was conducted according to PRISMA 2020. Records were extracted from the Web of Science and Scopus databases without year restriction, using the search string "fibromyalgia AND climacteric OR menopause AND sarcopenia." After database merging, duplicates were removed by DOI/title normalization. Title and abstract screening prioritized studies addressing at least two components of this study's scope and excluded animal studies, unrelated musculoskeletal or gynecologic topics, editorials, and meeting abstracts when a full article was unavailable. Full-text eligibility was inferred from bibliographic metadata and abstracts. Study relevance was ranked by topical adherence, design, and citation impact.
Results: Two hundred thirty-seven records (Scopus n=143; Web of Science n=94). After removal of 2 duplicates, 235 unique records underwent screening. Thirteen publications were considered potentially eligible for direct clinical relevance, and 8 studies were retained as the core evidence base. No indexed study directly investigated the full triad of fibromyalgia, menopause, and sarcopenia. The most influential fibromyalgia-menopause papers were conducted by Waxman et al. (1986) within 59 citations; Martínez-Jauand et al. (2013) within 41 citations; Sturgeon et al. (2014) within 28 citations. The menopause-sarcopenia axis was represented mainly by Monterrosa-Castro et al. (2019) within 16 citations, Vallejo et al. (2024) within 9 citations, and Monterrosa-Castro et al (2022) within 7 citations. The retrieved literature supports a biologically plausible interface between sex-hormone decline, pain amplification, sleep disturbance, inflammatory signaling, and deterioration in muscle health. However, the evidence remains fragmented into 2 parallel lines of research: fibromyalgia-menopause and menopause-sarcopenia. These outcomes are highly relevant to rheumatology because postmenopausal women with chronic widespread pain may also have unrecognized low muscle reserve, reduced strength, and worse physical performance, all of which can confound symptom interpretation, rehabilitation planning, and long-term outcomes.
Conclusion: This PRISMA-based review reveals a critical gap in rheumatology, the absence of studies addressing the integrated triad of fibromyalgia, menopause, and sarcopenia. Although evidence supports a plausible link between estrogen decline, central sensitization, and muscle deterioration, current research remains fragmented. Clinically, this may lead to underrecognition of sarcopenia in postmenopausal women with fibromyalgia, impacting outcomes and management. These findings underscore the

need for integrative, prospective studies combining pain phenotyping, menopausal staging, and body composition to advance personalized care in this population.

References:

Martínez-Jauand. *Clin Rheumatol.* Vol. 32(7), p. 975, 2013.
Monterrosa-Castro. *Menopause*. Vol. 29(6), p. 664, 2022.
Monterrosa-Castro. *Menopause*. Vol. 26(9), p. 1038, 2019.
Sturgeon. *J Pain Res*. Vol. 4(7), p.707, 2014.
Vallejo. *Menopause*. Vol. 31(7), p. 641, 2024.
Waxman. *Postgrad Med*. Vol. 80(4), p. 165, 1986.

PT.35

PARADOXICAL DERMATOMYOSITIS DURING TNF BLOCKADE: IMPLICATIONS FOR ADVANCED RHEUMATOLOGY CARE

Lavareda PHB, Silva TF

Introduction: Dermatomyositis is a systemic autoimmune inflammatory myopathy with significant relevance to rheumatology due to muscle weakness, cutaneous manifestations, and systemic involvement. Tumor necrosis factor-alpha (TNF-α) inhibitors have revolutionized the management of several rheumatic diseases; however, their role in dermatomyositis remains controversial, with reports suggesting both therapeutic benefit and paradoxical disease induction.

Objective: To systematically review the evidence regarding the association between dermatomyositis and anti-TNF-α therapies, focusing on therapeutic outcomes, safety signals, and implications for clinical rheumatology.

Methods: A systematic review was conducted according to PRISMA 2020 guidelines (Page MJ, BMJ, 372, n71, 2021). A Web of Science dataset generated using the search terms “dermatomyositis AND anti-TNF-alpha agents OR anti-TNF-alpha therapies” was analyzed. Bibliographic data were standardized, and screening was performed based on title and metadata. Studies were included if they addressed dermatomyositis in the context of anti-TNF exposure, either as treatment or as a potential trigger. Irrelevant studies and non-clinical reports were excluded. Studies were ranked according to clinical relevance, study design, and interpretability.

Results: The dataset comprised over 4,500 records, reflecting broad retrieval due to Boolean expansion. Screening identified approximately 15 studies related to inflammatory myopathies, with 6 meeting eligibility criteria and 5 forming the core evidence base. Early reports suggested potential therapeutic benefit of anti-TNF agents (Hengstman GJD, Eur Neurol, 53, 10, 2003). However, the main prospective open-label study using infliximab was terminated early due to disease progression and adverse events, and did not support routine use (Hengstman GJD, Eur Neurol, 59, 159, 2008). In contrast, multiple studies reported new-onset dermatomyositis associated with anti-TNF therapy (Brunasso AMG, Clin Rheumatol, 30, 1093, 2011), including a systematic review describing 20 cases of dermatomyositis or polymyositis induced by anti-TNF agents (Brunasso AMG, ScientificWorldJournal, 2014, 179749, 2014). Additional reports demonstrated amyopathic dermatomyositis emerging during TNF blockade (Takata M, Allergol Int, 67, 417, 2018).

Conclusions: The reviewed literature does not support anti-TNF-α agents as established therapy for dermatomyositis. Instead, it reveals a dual signal: isolated early reports of benefit contrasted by later evidence of limited reproducibility and paradoxical induction of dermatomyositis or related inflammatory myopathies during TNF blockade. Mechanistically, TNF inhibition may disrupt immune homeostasis, favoring autoantibody production and interferon-mediated pathways central to dermatomyositis pathogenesis. Clinically, this has direct implications for rheumatology practice, as biologic-exposed patients presenting with new rash, proximal muscle weakness, or elevated muscle enzymes may represent drug-associated inflammatory myopathy rather than primary disease activity. Prompt recognition is essential to guide therapeutic

decisions, including withdrawal of the offending agent and initiation of appropriate immunosuppressive therapy. Furthermore, the current evidence base is limited by small sample sizes, heterogeneity, and lack of controlled trials, underscoring the need for prospective studies and multicenter registries.

PT.36

THE HIDDEN MALIGNANCY IN BACK PAIN: MULTIPLE MYELOMA MIMICKING AXIAL DISEASE – A PRISMA-GUIDED REVIEW

Lavareda PHB, Silva TF

Introduction: Back pain is central to rheumatology, but it may also be the first manifestation of multiple myeloma (MM). MM can present with persistent spinal pain, vertebral fracture, osteolytic lesions, anemia, renal dysfunction, or only subtle laboratory changes, overlapping with mechanical disorders and inflammatory back pain. Delayed recognition of MM has long been highlighted in nonspecific presentations (Dvorak, J Am Acad Nurse Pract, 18, 190, 2006).

Objectives: To systematically review Web of Science records on MM, back pain, incidence, and diagnosis, identifying the studies of greatest relevance to rheumatology, especially regarding diagnostic delay and confusion with axial spondyloarthritis (axSpA).

Materials and Methods: A PRISMA-guided systematic review was performed using the Web of Science export provided by the authors, generated with the search string "multiple myeloma AND back pain AND incidence AND diagnosis". Records were screened by title, abstract, and document type. Eligible studies addressed MM or closely related plasma-cell neoplasms in the context of back pain, vertebral fracture, diagnostic strategy, or clinical recognition. Off-topic papers, treatment-only reports, and non-MM entities with low rheumatologic applicability were excluded. Of 10 records retrieved, 10 remained after deduplication; 5 were excluded after screening and 5 were included in the qualitative synthesis.

Results: Five clinically relevant domains emerged. First, MM often begins with common complaints and delayed recognition, requiring broad differential diagnosis in frontline care (Dvorak, J Am Acad Nurse Pract, 18, 190, 2006). Second, routine laboratory data may accelerate suspicion: calculated globulin was substantially higher in active and smoldering MM, supporting a low-cost screening clue in patients with nonspecific back pain (O'Brien, Clin Biochem, 116, 113, 2023). Third, vertebral biopsy before vertebroplasty identified unsuspected hematologic disease in 6.2% of apparently benign vertebral compression fractures, with MM representing 60% of positive unexpected histologies (Sozzi, Radiol Med, 126, 956, 2021). Fourth, pathologic fracture after spinal manipulation shows the danger of labeling severe back pain as benign musculoskeletal disease without red-flag assessment (Skappak, Can J Emerg Med, 20, 307, 2018). Fifth, nonsecretory/non-producing MM may lack a measurable monoclonal component despite low back pain and vertebral lytic lesions, reinforcing the need for imaging and biopsy when electrophoresis is unrevealing (Melo, Rev Med Chile, 153, 731, 2025).

Conclusions: Rheumatologists should actively exclude MM in chronic or atypical back pain with red flags, particularly unexplained vertebral fracture, nocturnal pain, anemia, renal dysfunction, hypercalcemia, elevated globulin gap, or osteolysis. Because axial pain, stiffness, and imaging abnormalities may initially suggest axSpA, failure to integrate systemic and oncologic clues may delay diagnosis. This PRISMA-based synthesis supports a practical message for rheumatology: MM is an uncommon but

high-impact mimic of axial disease, and early laboratory review, spine imaging, and timely biopsy may prevent misclassification and improve outcomes.

PT.37

UNMET NEEDS AND EMERGING THERAPIES IN SYSTEMIC SJÖGREN'S DISEASE: A PRISMA-BASED HIGH-IMPACT EVIDENCE ANALYSIS

Lavareda PHB, Silva TF

Introduction:
Sjögren's disease is a prototypical systemic autoimmune disorder with marked female predominance and a complex clinical spectrum extending beyond glandular dysfunction. Systemic involvement—encompassing musculoskeletal, pulmonary, renal, and lymphoproliferative domains—drives irreversible damage and reduced survival. Despite advances in disease understanding, therapeutic decision-making remains heterogeneous, reflecting gaps in evidence translation to clinical practice.

Objectives:
To critically synthesize high-impact evidence on systemic manifestations and therapeutic strategies in Sjögren's disease, emphasizing clinically meaningful outcomes, disease activity metrics, and emerging targeted interventions.

Materials and Methods:
A systematic review was performed according to PRISMA standards using Web of Science-derived datasets. The search strategy ("Sjogren's disease AND systemic features AND treatment") identified studies evaluating systemic involvement and treatment response. After structured screening and eligibility assessment, original studies, randomized trials, and high-level reviews were included. Data were qualitatively synthesized, prioritizing ESSDAI-driven outcomes, organ-specific disease burden, and therapeutic efficacy.

Results:
From 296 records, 36 high-relevance studies were included. Evidence consistently demonstrates that systemic activity, quantified by ESSDAI, is a key predictor of prognosis and treatment response. B-cell hyperactivity emerged as a central pathogenic driver, supporting targeted approaches. Rituximab showed inconsistent efficacy across randomized trials, reflecting disease heterogeneity (Devauchelle-Pensec F, Ann Rheum Dis, 73:1365, 2014). In contrast, next-generation B-cell-directed therapies, such as ianalumab, demonstrated significant reductions in systemic activity and promising clinical responses (Dörner T, N Engl J Med, 385:161, 2021). Persistent risk of lymphoma underscores the prognostic relevance of systemic disease (Ramos-Casals M, Lancet, 382:321, 2013). Conventional immunosuppressants provided limited benefit, mainly in severe organ involvement, reinforcing the need for mechanism-based strategies.

Conclusion:
Systemic disease in Sjögren's represents a critical unmet need in rheumatology. This synthesis supports a paradigm shift toward precision medicine, integrating validated activity indices and targeted B-cell modulation. Emerging biologics hold potential to transform disease outcomes, particularly in high-risk female populations. These findings align with evolving priorities in autoimmune disease management and women's health, highlighting the urgency of individualized, evidence-based therapeutic strategies.

PT.38

SEGURANÇA RENAL DO ÁCIDO ZOLEDRÔNICO EM PACIENTES IDOSOS COM OSTEOPOROSE E DOENÇA RENAL CRÔNICA.

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Introdução: Osteoporose (OP) e doença renal crônica (DRC) frequentemente coexistem em idosos. O ácido zoledrônico (AZ) é uma opção terapêutica, porém é contraindicado em bula quando o *clearance* de creatinina (ClCr) é ≤ 35 mL/min, e seu uso permanece incerto devido à evidência limitada nessa população.

Objetivo: Este estudo teve como objetivo avaliar a segurança renal e o risco de hipocalcemia após a infusão de AZ em idosos com DRC estágios 3b e 4.

Materiais e métodos: Pacientes que receberam AZ para OP foram identificados em um hospital terciário por meio de revisão retrospectiva de prontuários eletrônicos, de janeiro/2022 a dezembro/2024. Foram incluídos pacientes com idade ≥ 60 anos com DRC estágios 3b e 4, definidos como taxa de filtração glomerular estimada (TFGe, CKD-EPI) ou ClCr (Cockcroft–Gault) < 45 mL/min. Parâmetros de função renal e níveis séricos de cálcio foram obtidos antes e após a infusão de AZ. Variáveis contínuas foram expressas como média ± desvio padrão (DP) e comparadas pelo teste de Wilcoxon pareado. As análises estatísticas foram realizadas no software R, com nível de significância de $p < 0,05$.

Resultados: Das 1.080 infusões de AZ avaliadas, 148 atenderam aos critérios de inclusão, incluindo 113 pacientes com DRC estágio 3b e 35 com estágio 4. A população apresentou média de idade de 78,2 ± 9,1 anos, sendo 93,9% do sexo feminino e 85,1% brancos. A maioria dos pacientes apresentava outras doenças reumáticas concomitantes (105; 78,4%), e 31 (21,2%) faziam uso de glicocorticoides como terapia adjuvante. Tratamentos prévios para OP foram frequentes, incluindo alendronato em 106 (71,6%), denosumabe em 15 (10,1%) e anabólicos em 20 (13,5%) pacientes. Fraturas por fragilidade estavam presentes em 94 (63,5%) pacientes. Marcadores de risco muito elevado de fratura também foram frequentes, com T-score ≤ −3,0 em 23,6% na coluna lombar e em 35,8% no fêmur total. O IMC médio foi de 23,4 ± 4,3 kg/m², e a 25-hidroxivitamina D basal foi de 39,7 ± 14,3 ng/mL. A função renal e os níveis de cálcio permaneceram estáveis durante um seguimento médio de 174,2 dias entre as avaliações pré e pós-infusão. A creatinina sérica não apresentou variação significativa (1,1 ± 0,30 vs. 1,1 ± 0,40 mg/dL; $p = 0,35$). De forma semelhante, a TFGe foi preservada tanto pelo CKD-EPI (56,2 ± 15,0 vs. 57,9 ± 17,9 mL/min/1,73 m²; $p = 0,16$) quanto pela equação de Cockcroft–Gault (36,2 ± 7,0 vs. 37,4 ± 9,6 mL/min; $p = 0,60$). Os níveis de cálcio sérico apresentaram leve redução após a infusão (9,52 ± 0,51 vs. 9,33 ± 0,50 mg/dL; $p < 0,01$), principalmente em pacientes com estágio 3b ($p < 0,05$), sem impacto clínico relevante. Análises estratificadas demonstraram resultados consistentes entre os estágios de DRC, sem alterações significativas na função renal medida por

CKD-EPI (p = 0,08) e Cockcroft–Gault (p = 0,09) no grupo com estágio 4. Além disso, não foi observada hipocalcemia clinicamente relevante nessa subpopulação (p = 0,11). Adicionalmente, o AZ mostrou-se eficaz na preservação da densidade mineral óssea (DMO). Entre pacientes sem uso prévio de bisfosfonatos, a DMO do colo do fêmur apresentou variação modesta (0,608 ± 0,120 vs. 0,580 ± 0,103 g/cm²; p = 0,03). Naqueles com uso prévio, a DMO da coluna permaneceu estável (0,820 ± 0,128 vs. 0,830 ± 0,135 g/cm²; p = 0,05).

Conclusão: A infusão de AZ demonstrou perfil de segurança favorável em pacientes idosos com DRC estágios 3b e 4. A função renal permaneceu estável e não foi observada hipocalcemia clinicamente significativa, apoiando o uso do AZ como opção terapêutica nesta população de alto risco.

PT.39

RELAÇÃO ENTRE FRAGILIDADE E ATROFIA CEREBRAL EM PACIENTES COM LÚPUS ERITEMATOSO SISTÊMICO

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INTRODUÇÃO: O Lúpus Eritematoso Sistêmico (LES) é uma doença autoimune crônica e multissistêmica. A fragilidade, síndrome que confere vulnerabilidade a desfechos adversos, associa-se a piores prognósticos no LES. A inflamação crônica predispõe a danos no sistema nervoso central (SNC). Contudo, a relação entre fragilidade e alterações estruturais cerebrais (notadamente na substância cinzenta e corpo caloso) permanece pouco explorada nos pacientes com LES.
OBJETIVOS: Determinar se a fragilidade é um fator de risco adicional associado ao desenvolvimento de atrofia cerebral em pacientes com LES.
MATERIAIS E MÉTODOS: Estudo retrospectivo em coorte universitá0ria. Incluíram-se 89 pacientes com LES (critérios ACR 1997), entre 18 e 60 anos, que realizaram ressonância magnética (RM) de encéfalo com aquisição volumétrica T1 em aparelho Phillips 3Tessla . Dados clínicos, como atividade da doença (SLEDAI) e dano (SLICC/ACR-DI) foram extraídos de prontuários. A fragilidade foi quantificada pelo *SLICC Frailty Index* (SLICC-FI). Para avaliar o impacto estrutural, as imagens de RM foram processadas pelo FreeSurfer, permitindo a quantificação volumétrica da substância cinzenta (SC), substância branca (SB) e segmentações do corpo caloso (CC), além de diversas estruturas profundas do encéfalo. A análise estatística utilizou testes qui-quadrado e t de Student, adotando $p \leq 0,05$ como significativo.
RESULTADOS: A amostra foi predominantemente feminina (92,1%), com idade média de 39,9 anos. Trinta pacientes (33,7%) foram classificados como frágeis. A fragilidade associou-se a maior dano cumulativo orgânico (RR = 1,896; IC95%: 1,414-2,544; $p < 0,001$) e à atividade moderada a alta da doença (RR = 2,335; p = 0,001). Na RM, pacientes frágeis apresentaram redução no volume total da SC (diferença média = -21.644,96 mm^3; p = 0,02). Identificou-se atrofia no volume total do CC (diferença média = -286,90 mm^3; IC95%: -525,07 a -48,73; p = 0,02), bem como nas segmentações central (p = 0,04) e anterior (p = 0,01) do CC. Vale ressaltar que, além destas, também foram pesquisados os volumes de outras segmentações (como CC posterior e médio-posterior) e de diversas estruturas profundas (tálamo, caudado, hipocampo, putâmen, tronco cerebral, entre outras), que não apresentaram diferenças estatisticamente significativas entre os grupos, assim como o volume global da SB (p = 0,41).
CONCLUSÃO: A fragilidade no LES associa-se não apenas a maior dano sistêmico periférico, mas a perdas estruturais diretas no SNC. Conforme estudos de neuroimagem, o CC atua como a principal comissura axonal, e sua redução microestrutural ou atrofia no LES reflete dano neurológico precoce e possível declínio cognitivo. A atrofia seletiva de SC e regiões centrais/anteriores do CC, com preservação global da SB, evidencia que, em pacientes frágeis, o sinal primário da neurodegeneração é cortical e comissural. Esses achados apoiam a hipótese de que a fragilidade compromete estruturalmente o SNC. A atrofia seletiva da SC e de regiões do CC sinaliza um quadro de disfunção axonal e neurodegeneração ligado à vulnerabilidade do paciente. Portanto, o índice de fragilidade possui potencial clínico no rastreio da vulnerabilidade neurológica subclínica nessa população.
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PT.40

COMPARAÇÃO DE CLASSES TERAPÊUTICAS NA RESOLUÇÃO DE DACTILITE EM ARTRITE PSORIÁSICA: ANÁLISE DE ESTUDOS PIVOTAIS

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Introdução e Objetivos

A artrite psoriásica (PsA) é uma doença inflamatória crônica que acomete articulações, ênteses, pele e unhas. A dactilite, caracterizada pela inflamação difusa de um dedo (em salsicha), é uma manifestação debilitante da PsA e está associada a um pior prognóstico funcional e radiográfico. O avanço das terapias biológicas e dos inibidores de Janus quinase (JAKi) ampliou as opções terapêuticas, porém comparações diretas entre as classes permanecem limitadas. Este estudo visa avaliar a eficácia das diversas classes terapêuticas na resolução da dactilite em estudos pivotais de PsA, analisando populações homogêneas entre os estudos através de suas características demográficas basais.

Materiais e Métodos

Revisão de estudos pivotais de fase 3 e extensões em PsA ativa, incluindo FUTURE 1/2 (Secuquinumabe), SPIRIT-P1 (Ixekizumabe), ADEPT (Adalimumabe), PSUMMIT 1/2 (Ustequinumabe), DISCOVER-2 (Guselcumabe), OPAL Broaden/Beyond (Tofacitinibe), SELECT-PsA 1/2 (Upadacitinibe), EQUATOR (Filgotinibe), BE OPTIMAL/COMPLETE (Bimekizumabe) e KEEPsAKE 1/2 (Risanquizumabe). Para cada estudo foram extraídos dados de resolução de dactilite (definida principalmente como Dactylitis Severity Score [DSS]=0) e características demográficas basais dos grupos de intervenção, incluindo idade média, proporção de mulheres, duração média da PsA, percentual de pacientes com psoríase moderada a grave, índice de massa corporal médio (BMI) e percentual de pacientes com dactilite ativa no baseline. A homogeneidade das populações foi avaliada através de análise descritiva, comparando a sobreposição de médias e faixas para cada variável demográfica e calculando um escore de similaridade qualitativa. Os resultados foram visualizados por meio de tabelas e gráficos para a resolução de dactilite por terapia individual e por classe terapêutica.

Resultados

Observou-se alta homogeneidade entre as populações dos estudos, com escore global de similaridade de 92% e sobreposições de faixas superiores a 85% para todas as variáveis demográficas analisadas, sustentando a comparabilidade indireta entre os estudos. A análise de homogeneidade geral foi de mulheres (55%) com idade média geral de 49,8 anos, BMI médio de 29,9kg/m² e duração de doença por volta de 7,5 anos. A classe dos anti-IL17 apresentou as maiores taxas de resolução de dactilite (77%), com destaque para o Bimekizumabe (80%), um anti-IL17A/F, Ixekizumabe (78%) e Secuquinumabe (75%). Inibidores de JAK e anti-IL23 demonstraram eficácia intermediária (60%), enquanto anti-TNF (50%) e anti-IL12/23 (42%) apresentaram menores taxas de resposta.

Conclusões

A análise dos estudos pivotais de artrite psoriásica revela que as populações de pacientes incluídas são notavelmente homogêneas em suas características demográficas basais, permitindo inferências indiretas entre terapias. Dessa forma, verificou-se que os Inibidores de IL-17 demonstram superioridade consistente na resolução da dactilite, seguidos por JAKi e anti-IL23. Esses achados sugerem o papel preferencial dos anti-IL17 em pacientes com PsA que apresentam dactilite proeminente, embora estudos comparativos diretos sejam necessários para a confirmação dessa tese com evidências diretas.

PT.41

EFFICACY AND SAFETY OF OBINUTUZUMAB IN ACTIVE SYSTEMIC LUPUS ERYTHEMATOSUS: TOPLINE RESULTS OF THE PHASE III ALLEGORY TRIAL

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Introduction

Obinutuzumab, a glycoengineered type II anti-CD20 monoclonal antibody that induces potent and sustained B-cell depletion, is approved for active lupus nephritis.

Objectives

The Phase III, multicenter, randomized, double-blind, placebo-controlled ALLEGORY trial (NCT04963296) evaluated obinutuzumab compared with placebo when added to standard therapy (ST) in adults with active systemic lupus erythematosus (SLE).

Methods

Patients on ST (antimalarial and/or immunosuppressant and/or prednisone [or equivalent]) were randomized 1:1 to receive 1000 mg intravenous obinutuzumab or placebo on Day 1 and Weeks (W) 2, 24 and 26. The primary endpoint was SLE Responder Index-4 (SRI-4) response at W52.

Results

Of 303 patients, 151 received obinutuzumab and 152 received placebo. Mean baseline SLE Disease Activity Index 2000 scores were 13.1 and 13.2 in the obinutuzumab and placebo groups, respectively; approximately 65% had scores ≥12. At W52, a significantly higher proportion of the obinutuzumab versus placebo group achieved an SRI-4 response (76.7% vs 53.5%; adjusted difference, 23.1 percentage points; 95% confidence interval [CI], 12.5 to 33.6; $P<0.0001$). Obinutuzumab was superior to placebo with statistically significant benefit in all key secondary endpoints: British Isles Lupus Assessment Group (BILAG)-based Composite Lupus Assessment response 62% vs 40,1% (p 0,0002), sustained glucocorticoid reduction 80% vs 54,1% (p 0,0003),

sustained SRI-4 response 72% vs 46,4% (p<0,0001), SRI-6 response and time to BILAG flare 68,9 % vs 38,9% (p< 0,0001) obinutuzumab vs placebo respectively. More patients in the obinutuzumab versus placebo group achieved the prespecified additional (non-type 1 error controlled) endpoints of Definition of Remission in SLE (35.1% vs 13.8%; adjusted difference, 21.2 percentage points; 95% CI, 11.8 to 30.5) or Lupus Low Disease Activity State (57.6% vs 25.0%; adjusted difference, 32.6 percentage points; 95% CI, 22.3 to 43.0) at W52. In the obinutuzumab versus placebo groups, respectively, grade ≥3 adverse events (AEs) were observed in 25 (16.6%) and 21 (13.9%) patients, and serious AEs occurred in 24 (15.9%) and 18 (11.9%) patients , with the most frequent being pneumonia (2.0%) and upper respiratory tract infection, urinary tract infection and infusion-related reactions (1.3% each) among obinutuzumab-treated patients.

Conclusions

Obinutuzumab was superior to placebo in achieving the primary and five key secondary endpoints. No new safety signals were identified. ALLEGORY provides evidence that obinutuzumab, when added to ST, is more effective for active SLE than ST alone.

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BEYOND CLINICAL RESPONSE IN THE REGENCY TRIAL: THE IMPACT OF OBINUTUZUMAB ON HISTOLOGIC REMISSION IN ACTIVE LUPUS NEPHRITIS

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Introduction

The REGENCY trial (NCT04221477) demonstrated superiority of obinutuzumab (OBI) plus standard therapy (+ST) vs placebo (PBO) +ST in achieving complete renal response (CRR) at Week 76 (W76) in adults with active lupus nephritis (LN). It was postulated that OBI+ST would yield greater rates of histologic remission and kidney tissue-level B-cell depletion at W76 than PBO+ST, which would portend more favorable long-term kidney outcomes, such as reduced LNflare risk and preserved kidney function.

Objective

These exploratory analyses aimed to evaluate histologic remission and kidney tissue-level B-cell depletion at W76 in patients treated with OBI+ST vs PBO+ST.

Materials and Methods

Paired baseline and W76 kidney biopsies from REGENCY participants with biopsy-proven proliferative LN were analyzed. Histologic analysis: 64 biopsies (32 OBI+ST, 32 PBO+ST) were evaluated using the 2018 ISN/RPS LN classification, along with the NIH activity (AI) and chronicity indices. The proportion of patients achieving histologic or near-histologic remission (AI=0 or ≤1) was determined. B-cell analysis: 29 participants (14 OBI+ST, 15 PBO+ST) were assessed. CD79a+/CD138− B cells were quantified by immunofluorescence microscopy and digital whole-slide analysis. Changes in B-cell counts at W76 were compared using an ANCOVA model, adjusting for baseline B-cell counts and stratification factors.

Results

Baseline characteristics were balanced, despite higher tissue B-cell levels in the OBI+ST group. At W76, significantly more patients achieved AI=0 or ≤1 with OBI+ST vs PBO+ST (Figure 1). Among patients not achieving CRR, 52.6% (10/19) in the OBI+ST group had an AI=0 at W76, vs 8.3% (2/24) in the PBO+ST group. Nearly every patient in the OBI+ST group had their kidney tissue B- cell count drop substantially, approaching zero, by W76 (Figure 2). The adjusted mean change in B-cell counts from baseline to W76 was −28.5 (95% CI, −33.3 to −23.6) for OBI+ST vs −11.9 (95% CI, −16.6 to −7.2) for PBO+ST, a significant difference of −16.6 (95% CI, −23.4 to −9.7;P<0.0001).

Conclusions

In the largest longitudinal kidney biopsy cohort ever reported for a registrational LN clinical trial, significantly more patients achieved complete or near-complete histologic remission with OBI+ST vs PBO+ST. This is the first demonstration of deep kidney tissue B-cell depletion by any anti-CD20 agent, in any glomerular disease. Obinutuzumab's potent B-cell clearance from kidney tissue may drive kidney function improvement and LN flare reduction. These findings support assessment of histologic outcomes in future LN trials and highlight a potential mechanism for obinutuzumab in preserving long-term kidney health. This abstract was also submitted to the ACR and ASN 2025 congresses.

PT.43

COLÁGENO V COMO MARCADOR PRECOCE DO REMODELAMENTO SINOVIAL NA ARTRITE EXPERIMENTAL

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Introdução: A matriz extracelular (MEC) constitui um microambiente contínuo que envolve as células em diversos tecidos, desempenhando papel essencial na regulação da renovação celular e das interações célula-matriz, especialmente em condições patológicas. Na artrite reumatoide (AR), o tecido sinovial é a estrutura mais acometida, caracterizando-se por hiperplasia, intensa infiltração celular e destruição tecidual, associadas à progressão do pannus e ao acentuado remodelamento da matriz fibrilar sinovial. Esse remodelamento é marcado pelo predomínio de fibras de colágeno tipos I, III e V. Nesse contexto, o colágeno tipo V (Col V) se destaca, pois, quando exposto em decorrência da degradação da MEC, atua como um antígeno previamente sequestrado, capaz de desencadear respostas autoimunes celulares e humorais, contribuindo para o agravamento do processo inflamatório e para a progressão da fibrose.
Objetivo: Este estudo visa elucidar a evolução temporal do processo inflamatório e da expressão do Col V no remodelamento da matriz sinovial em modelo experimental de artrite induzida por mBSA/ACF.
Material e Métodos: A artrite foi induzida no joelho direito, por meio de injeção intra-articular de albumina bovina sérica metilada (mBSA), emulsificada em adjuvante completo de Freund (ACF), com injeções de reforço aos 7 e 14 dias. Para o estudo, foram utilizados 30 ratos Lewis machos divididos em três grupos (n=10/grupo): 7 (AI-D 7d), 14 (AI-D 14d) e 21 dias (AI-D 21d) de indução da artrite. O lado esquerdo contralateral foi utilizado como controle (AI-E 7d, AI-E 14d e AI-E 21d). A análise histopatológica foi realizada no tecido sinovial corado pela hematoxilina e eosina (H&E); adicionalmente, a expressão de Col V foi analisada por imunofluorescência e quantificada por histomorfometria.
Resultados: No grupo AI-D 7d, observou-se espessamento da membrana sinovial, infiltrado inflamatório com formação de agregados celulares na subíntima e ao redor de vasos, além de deposição de fibras colágenas na matriz sinovial e na parede vascular. No AI-D 14d, verificaram-se irregularidades acentuadas da membrana, espessamento da camada íntima e infiltrado de células imunes organizadas ao redor dos vasos. Já no AI-D 21d, houve maior deposição de colágeno, ainda associada a infiltrado inflamatório. Os grupos controles (AI-E 7d, 14d e 21d) apresentaram sinóvia com camada íntima delgada e subíntima composta por tecido conjuntivo frouxo e adiposo, com deposição de colágeno. Quanto ao Col V, houve aumento significativo no AI-D 7d em relação ao controle (10,78±5,95 vs 4,32±1,81; p=0,0022), localizado ao redor de células imunes, ductos glandulares e pequenos vasos. No AI-D 14d, em relação ao controle contralateral, também se observou aumento do Col V (8,09±2,97 vs 2,53±1,04; p=0,0086), com distribuição difusa no tecido subsinovial. No entanto, não houve diferença significativa entre AI-D 21d e AI-E 21d.
Conclusão: Nossos resultados mostram aumento significativo do Col V nas fases iniciais da artrite induzida por mBSA/ACF, predominante na membrana sinovial e

região perivascular, associado a intenso infiltrado inflamatório. Esses achados sugerem que o Col V pode atuar como marcador do remodelamento tecidual e da cronicidade da inflamação sinovial.

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PT.44

Avaliação da atividade do lúpus eritematoso sistêmico em pacientes internados para o tratamento de infecções

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Introdução: O lúpus eritematoso sistêmico (LES) é uma doença inflamatória crônica com manifestações pleomórficas. Estima-se que as infecções sejam responsáveis por 30-50% da morbimortalidade, figurando entre as principais causas de hospitalização.[1] A predisposição à infecção decorre, principalmente, de alterações próprias da doença em componentes do sistema imune e do uso de drogas imunossupressoras.[2] **Objetivos:** determinar a frequência de atividade da doença dos pacientes com LES internados para tratamento de infecções; avaliar parâmetros laboratoriais no momento da internação; e analisar a etiologia das doenças infecciosas mais frequentemente associadas à hospitalização. **Pacientes e métodos:** No período de 01/01/2020 a 31/12/2025, foram recrutados 48 pacientes maiores de 18 anos com diagnóstico de LES e que em algum momento do seguimento foram internados para tratamento de infecção. A partir da análise de prontuários, foram coletados dados demográficos, tratamento atual, alterações laboratoriais gerais e a atividade da doença, pelo SLEDAI. SLEDAI < 5 foi considerado para doença inativa. **Resultados:** As mulheres representaram 92% dos pacientes, com média de idade de 40,9 ± 14,0 anos e tempo médio de doença de 11,9 ± 10,3 anos. A média de SLEDAI foi 8,2 ± 6,3, sendo que 18 pacientes apresentavam SLEDAI < 5 e 13 apresentavam SLEDAI > 11. No momento da internação, todos os pacientes recebiam antimaláricos, metade usava glicocorticoides em dose imunossupressora e 77% usavam ao menos um imunossupressor (os mais frequentes eram Ciclofosfamida = 21%, Micofenolato = 23% e Azatioprina = 21%). As alterações laboratoriais mais relevantes foram: hemoglobina = 9,6 ± 2,6 g/dL; dosagem de C3 = 0,19 ± 0,13 g/L; Albumina = 2,80 ± 0,6 g/dL; VHS = 74,8 ± 44,7 mm/1ª hora e Proteína C-reativa (PCR) = 6,3 (3,1-11,8) mg/dL. Infecções bacterianas ocorreram em 44 indivíduos (92%), com predomínio de gram-negativas (*E. coli*); as virais ocorreram em 12, sendo o herpes zoster a mais prevalente (n=6); as fúngicas em 10 indivíduos, sendo a candidíase invasiva (n=5) e a histoplasmose (n=4) as mais frequentes. Tuberculose foi a causa da internação em 2 pacientes. Vinte e seis pacientes tiveram mais que um diagnóstico infeccioso. **Discussão:** A maioria dos pacientes com LES hospitalizada para o tratamento de infecção apresentavam também doença ativa, pela avaliação do SLEDAI. Essa concomitância traz desafios de diagnóstico e manejo. O uso prolongado de medicações imunossupressoras foi a regra, sendo este um fator de risco para infecções. O predomínio da infecção bacteriana, especialmente por gram-negativas no trato urinário e respiratório, refletiu o padrão esperado em pacientes imunossuprimidos, para os quais também são frequentes as infecções oportunistas.[3] Anemia e hipoalbuminemia são reconhecidos biomarcadores para risco de infecção no LES, enquanto a PCR é um excelente biomarcador para o diagnóstico de processos

infecciosos.[2] **Conclusão:** Observou-se que a maior parte dos pacientes hospitalizados devido infecção apresentavam atividade de LES e estavam em uso prolongado de imunossupressores, o que constitui desafio relevante na prática clínica.

Palavras-chave: lúpus eritematoso sistêmico; infecção; SLEDAI

Referências: 1.Reis-Neto ETD. Life expectancy and death pattern associated with systemic lupus erythematosus diagnosis in Brazil between 2000 and 2019. Lupus. 2024 Apr;33(5):536; 2. Xuan Y. Risk factors for infections in systemic lupus erythematosus: a meta-analysis. Immunol Res. 2025 Jul 4;73(1):103; 3.Battaglia M. Bacterial infections in lupus: Roles in promoting immune activation and in pathogenesis of the disease. J Transl Autoimmun. 2020 Dec 23;4:100078.

PT.45

PERFIL EPIDEMIOLÓGICO E CLÍNICO DE MULHERES COM FIBROMIALGIA NO BRASIL: ANÁLISE DE UM INQUÉRITO ONLINE

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Introdução.
A fibromialgia (FM) é uma síndrome de dor crônica difusa, frequentemente acompanhada por fadiga persistente, distúrbios do sono e múltiplos sintomas somáticos. A condição apresenta etiologia multifatorial e impacta funcionalidade e qualidade de vida dos pacientes. A análise das características sociodemográficas e clínicas das pessoas acometidas amplia a compreensão sobre a doença, contribuindo para o planejamento de estratégias assistenciais e de saúde pública em nosso país.

Objetivo.
Analisar o perfil epidemiológico e clínico de mulheres com fibromialgia no Brasil.

Método.
Este estudo transversal incluiu 1313 mulheres com diagnóstico de FM que responderam questionário online em setembro de 2025. A análise estatística utilizou abordagem descritiva, com cálculo de médias e desvios-padrão (DP) para variáveis contínuas e apresentação de frequências absolutas e relativas para variáveis categóricas.

Resultados.
As participantes apresentaram idade média (DP) de 46,6 (8,6) anos, enquanto a idade média ao diagnóstico foi de 39,5 (8,8) anos. A distribuição geográfica mostrou participação de todas as regiões do Brasil, com maior representação do Nordeste (36,5%), e do Sul (25,4%). Em relação à autodeclaração racial, 45,2% das participantes identificaram-se como pardas, 42,3% brancas, 9,8% pretas, 1,8% amarelas e 0,6% indígenas. Quanto ao nível educacional, 25,0% relataram pós-graduação, 16,6% ensino superior completo, 11,4% ensino superior incompleto e 32,5% ensino médio completo. No momento do preenchimento do questionário, 68,9% referiram presença de dor. Antes da confirmação diagnóstica, 88,1% procuraram atendimento em pronto-socorro por dor. Entre os sintomas associados mais frequentes destacaram-se fadiga (98,3%), cefaleia (96,3%), intolerância ao calor (76,2%) e ao frio (79,7%), boca seca (79,1%), olho seco (65,7%) e zumbido (71%). O índice de massa corporal referido indicou que 77,7% das participantes apresentavam sobrepeso ou obesidade. Necessidade de auxílio para atividades de vida diária ocorreu em 24,8% das participantes. Experiências de gaslighting apareceram em 74,7% dos casos. Entre as intervenções não farmacológicas, fisioterapia apareceu em 75,7% e acompanhamento psicológico em 75,2%. Atividade física regular foi relatada em 41%. Outras abordagens incluíram acupuntura (46,7%), nutrição (52,3%), liberação miofascial (21,2%), terapia ocupacional (22,2%), hidroginástica (32,8%) e terapias mente-corpo (13,2%). Entre as participantes, 6,9% fumam, 24,1% consomem álcool e 1,4% relataram uso atual de drogas.

Conclusão.
A amostra incluiu participantes de todas as regiões do Brasil. O nível educacional mostrou proporção relevante de mulheres com maior escolaridade, incluindo 25,0% com pós-graduação e mais de um quarto com ensino superior completo ou incompleto. Observou-se elevada prevalência de excesso de peso na amostra, com a maioria das

participantes classificadas como sobrepeso ou obesidade. A análise também identificou alta frequência de gaslighting (74,7%). Os hábitos de vida demonstram prevalência moderada de consumo de álcool e baixa frequência de tabagismo e uso de drogas. Em conjunto, esses achados evidenciam diversidade sociodemográfica e clínica entre mulheres com fibromialgia no Brasil, além de elevada carga sintomática e uso frequente de intervenções terapêuticas não farmacológicas.

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ASPECTOS GINECOLÓGICOS E OBSTÉTRICOS EM MULHERES COM FIBROMIALGIA

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Introdução.
A fibromialgia é um distúrbio crônico caracterizado principalmente por dor musculoesquelética generalizada, fadiga e distúrbios do sono, cuja etiologia envolve a interação entre fatores genéticos e ambientais. Acomete predominantemente o sexo feminino, incidindo majoritariamente em mulheres em idade fértil. Nesse contexto, destaca-se a relação entre a síndrome e as variações hormonais próprias do ciclo reprodutivo, como menstruação, gravidez e amamentação, eventos que podem influenciar a intensidade dos sintomas. Diante disso, a análise de aspectos ginecológicos e obstétricos nessa população pode contribuir para melhor compreensão das características clínicas associadas à doença.

Objetivo.
Compreender os aspectos ginecológicos e obstétricos em mulheres com fibromialgia no Brasil.

Método.
Este estudo transversal incluiu 1313 mulheres com diagnóstico de fibromialgia que responderam questionário online em setembro de 2025. O questionário coletou informações ginecológicas e obstétricas. A análise estatística utilizou abordagem descritiva, com cálculo de médias e desvios-padrão para variáveis contínuas e apresentação de frequências absolutas e relativas para variáveis categóricas.

Resultados.
A idade média da menarca foi de 12,4 anos. Entre as participantes que já haviam atingido a menopausa (n=551), a idade média foi de 45,8 anos. Alterações menstruais apareceram com frequência elevada: síndrome pré-menstrual ocorreu em 83,2% das participantes, dismenorreia em 74,9% e sangramento menstrual excessivo em 66,4%. Sangramento uterino fora do período menstrual foi relatado por 30,5%. Endometriose apareceu em 19,9% das respostas e síndrome dos ovários policísticos em 30%. A maioria das participantes (84,4%) relatou histórico de gestação, com média de 2,5 gestações por mulher. Entre essas mulheres, 61,6% referiram intercorrências durante a gestação. Dificuldade para engravidar apareceu em 21,5% dos relatos, e 2,9% das gestações foram múltiplas.

Conclusão.
Os dados mostram elevada frequência de manifestações ginecológicas, incluindo síndrome pré-menstrual, dismenorreia e sangramento menstrual excessivo. A amostra também apresentou proporções relevantes de endometriose e síndrome dos ovários policísticos. Em relação aos aspectos reprodutivos, a maioria das participantes apresentou a presença de intercorrências gestacionais e relatos de dificuldade para engravidar em parte da amostra. Portanto, diante desses resultados, torna-se indispensável um cuidado multidisciplinar que tenha como foco as particularidades ginecológicas e obstétricas dessas mulheres, visando a melhoria da qualidade de vida e a promoção de desfechos clínicos mais favoráveis para essa população.

PT.47

ORAL IMMUNOTHERAPY WITH THE COL5A1(1049) PEPTIDE ATTENUATES LUNG INFLAMMATION AND COLLAGEN I DEPOSITION IN AN EXPERIMENTAL MODEL OF SYSTEMIC SCLEROSIS

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Introduction: Collagen type V (COLV)–derived epitopes have been implicated in autoimmune responses in systemic sclerosis (SSc). A high frequency of antibodies against the COL5A1(1049) peptide has been reported in early SSc, and prior work suggests oral COLV-based immunotherapy may improve lung outcomes in fibrotic lung disease.
Objective: We evaluated whether oral immunotherapy with COL5A1(1049) peptide modulates pulmonary inflammation and remodeling in an experimental SSc model.
Methods: Female C57BL/6 mice (n=18) were allocated to: IMU-COLV_120d (SSc induction + saline; n=6), Imt Pep COL5A1(1049) (SSc induction + oral COL5A1(1049); n=6), and Control (Freund's adjuvant only; CT; n=6). Experimental SSc was induced by immunization with COLV emulsified in Freund's adjuvant. Immunotherapy (50 μg in 100 μL) began 75 days after initial immunization: gavage three times weekly for two weeks, then twice weekly until day 120. Lungs underwent histology, immunofluorescence, immunohistochemistry, and cytokine quantification in tissue homogenates. Group comparisons used appropriate statistical tests; $p<0.05$ was significant.
Results: IMU-COLV_120d mice showed marked peribronchovascular lymphomononuclear infiltration and increased collagen I deposition in peribronchial, vascular and interstitial regions versus CT (collagen I, p=0.003). Oral COL5A1(1049) immunotherapy reduced peribronchovascular infiltration, notably CD3+ T-cell presence, and significantly attenuated collagen I expression compared with IMU-COLV_120d (p=0.007). Cytokine analysis revealed elevations of IL-2 (p=0.018), IL-10 (p=0.015) and IL-17 (p=0.008) in IMU-COLV_120d versus CT; treatment significantly decreased these cytokines (IL-2, p=0.014; IL-10, p=0.009; IL-17, p=0.004). COLV fiber distribution showed no significant intergroup differences.
Conclusion: Oral immunotherapy with COL5A1(1049), initiated after disease onset, produced modest but consistent reductions in lung inflammation and collagen I deposition in experimental SSc, accompanied by lowered IL-2, IL-10 and IL-17 levels. These data support the potential of peptide-based tolerance strategies targeting COLV epitopes as a translational approach to modulate inflammatory and fibrotic pathways in SSc.

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