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Current Awareness Bulletin – Rheumatology
April and May 2015

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New Reviews – April 2015

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Updated Reviews – April 2015

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Updated Reviews – February 2015

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New Reviews – January 2015

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Rituximab for rheumatoid arthritis

Zonisamide for neuropathic pain in adults

Updated Reviews – January 2015

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What’s New in Rheumatology?

Rheumatology related topics

Journal Articles

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Journal Articles:

1. A 24-month prospective study on the efficacy and safety of two different monthly regimens of vitamin D supplementation in pre-menopausal women with systemic lupus erythematosus

Citation: Lupus, April 2015, vol./is. 24/(499-506), 0961-2033;1477-0962 (25 Apr 2015)

Author(s): Andreoli L., Dall’Ara F., Piantoni S., Zanola A., Piva N., Cutolo M., Tincani A.

Language: English

Abstract: Background: Low vitamin D (vit.D) serum levels are common in patients with systemic lupus erythematosus (SLE) and seem to correlate with higher disease activity. We investigated the effects of different regimens of vit.D supplementation in SLE patients with inactive disease. Methods: This 24-month prospective study included 34 SLE women who were randomized to receive, together with their ongoing treatment, a standard regimen (SR) of cholecalcipherol (25,000 UI monthly) or an intensive regimen (IR) (300,000 UI initial bolus followed by 50,000 UI monthly) for one year and then were switched to the other regimen in the second year. Patients were seen quarterly for assessment of 25-OH vit.D levels, disease activity, SLE serology and bone metabolism markers. Results: By intra-patient comparison, only the IR was found able to significantly raise vit.D serum levels. After 12 months, values above 30 ng/ml were found in 75% of patients in IR while in only 28% in SR. No significant differences in disease activity and SLE serology were found at any time point between SR and IR. No changes in the mineral metabolism were observed. Conclusions: The IR was safe and effective in obtaining sufficient levels of vit.D in most SLE patients. However, both regimens of supplementation did not differently affect disease activity nor SLE serology.

Publication type: Journal: Article
Source: EMBASE
Full text: Available Lupus at Lupus

2. A randomized double-blind placebo-controlled study adding high dose vitamin D to analgesic regimens in patients with musculoskeletal pain

Citation: Lupus, April 2015, vol./is. 24/(483-489), 0961-2033;1477-0962 (25 Apr 2015)

Author(s): Gendelman O., Itzhaki D., Makarov S., Bennun M., Amital H.

Language: English

Abstract: Background: The current mode of therapy for many patients with musculoskeletal pain is unsatisfactory. Purpose: We aimed to assess the impact of adding 4000 IU of vitamin D on pain and serological parameters in patients with musculoskeletal pain. Materials and methods: This was a randomized, double-blinded and placebo-controlled study assessing the effect of 4000 IU of orally given vitamin D3 (cholecalciferol) (four gel capsules of 1000 IU, SupHerb, Israel) vs. placebo on different parameters of pain. Eighty patients were enrolled and therapy was given for 3 months. Parameters were scored at three time points: prior to intervention, at week 6 and week 12. Visual analogue scale (VAS) scores of pain perception were recorded following 6 and 12 weeks. We also measured serum levels of leukotriene B4 (LTB4), interleukin 6 (IL-6), tumor necrosis factor alpha (TNFa) and prostaglandin E2 (PGE2) by ELISA. Results: The group receiving vitamin D achieved a statistically significant larger decline of their VAS measurement throughout the study compared with the placebo group. The need for analgesic ‘rescue therapy’ was significantly lower among the vitamin D-treated group. TNFa levels decreased by 54.3% in the group treated with vitamin D and increased by 16.1% in the placebo group. PGE2 decreased by39.2% in the group treated with vitamin D and increased by 16% in the placebo group. LTB4 levels decreased in both groups by 24% (p<0.05). Conclusion: Adding 4000 IU of vitamin D for patients with musculoskeletal pain may lead to a faster decline of consecutive VAS scores and to a decrease in the levels of inflammatory and pain-related cytokines.

Publication type: Journal: Article
Source: EMBASE
Full text: Available Lupus at Lupus

3. Biologic treatment in Sjogren's syndrome

Citation: Rheumatology (Oxford, England), February 2015, vol./is. 54/2(219-230), 1462-0332 (01 Feb 2015)

Author(s): Ciurtin C.

Language: English

Abstract: SS is a chronic systemic autoimmune disease characterized by decreased exocrine gland function. A variety of other disease manifestations may also be present, including general constitutional symptoms and
extraglandular features. A multidisciplinary approach focused on both local and systemic medical therapies is needed as the disease has a wide clinical spectrum. The current treatment for SS is mainly symptomatic. However, there is evidence that systemic drugs are effective in controlling extraglandular manifestations of the disease. Overall evidence for the role of conventional immunosuppressive therapy is limited. A number of attempts to use biologic therapies have led to variable results. Biologic agents targeting B cells, such as rituximab, epratuzumab and belimumab, have shown promising results, but further studies are needed to validate the findings. Early-phase studies with abatacept and alefacept proved that T cell stimulation inhibition is another potentially effective target for SS treatment. Modulation or inhibition of other targets such as IFN, IL-6 and Toll-like receptor are also currently being investigated. We have summarized the available evidence regarding the efficacy of biologic treatments and discuss other potential therapies targeting pathways or molecules recognized as being involved in the pathogenesis of SS.

**Publication type:** Journal: Review

**Source:** EMBASE

### 4. Brief Report: Intestinal dysbiosis in ankylosing spondylitis

**Citation:** Arthritis and Rheumatology, March 2015, vol./is. 67/3(686-691), 2326-5191;2326-5205 (01 Mar 2015)

**Author(s):** Costello M.-E., Ciccia F., Willner D., Warrington N., Robinson P.C., Gardiner B., Marshall M., Kenna T.J., Triolo G., Brown M.A.

**Language:** English

**Abstract:** Objective Ankylosing spondylitis (AS) is a common, highly heritable immune-mediated arthropathy that occurs in genetically susceptible individuals exposed to an unknown but likely ubiquitous environmental trigger. There is a close relationship between the gut and spondyloarthritis, as exemplified in patients with reactive arthritis, in whom a typically self-limiting arthropathy follows either a gastrointestinal or urogenital infection. Microbial involvement in AS has been suggested; however, no definitive link has been established. The aim of this study was to determine whether the gut in patients with AS carries a distinct microbial signature compared with that in the gut of healthy control subjects. Methods Microbial profiles for terminal ileum biopsy specimens obtained from patients with recent-onset tumor necrosis factor antagonist-naive AS and from healthy control subjects were generated using culture-independent 16S ribosomal RNA gene sequencing and analysis techniques. Results Our results showed that the terminal ileum microbial communities in patients with AS differ significantly (P < 0.001) from those in healthy control subjects, driven by a higher abundance of 5 families of bacteria (Lachnospiraceae [P = 0.001], Ruminococcaceae [P = 0.012], Rikenellaceae [P = 0.004], Porphyromonadaceae [P = 0.001], and Bacteroidaceae [P = 0.001]) and a decrease in the abundance of 2 families of bacteria (Veillonellaceae [P = 0.01] and Prevotellaceae [P = 0.004]). Conclusion We show evidence for a discrete microbial signature in the terminal ileum of patients with AS compared with healthy control subjects. The microbial composition was demonstrated to correlate with disease status, and greater differences were observed between disease groups than within disease groups. These results are consistent with the hypothesis that genes associated with AS act, at least in part, through effects on the gut microbiome.

**Publication type:** Journal: Article

**Source:** EMBASE

### 5. Diagnosis and management of non-criteria obstetric antiphospholipid syndrome

**Citation:** Thrombosis and Haemostasis, 2015, vol./is. 113/1(13-19), 0340-6245 (2015)

**Author(s):** Arachchilage D.R.J., Machin S.J., Mackie I.J., Cohen H.

**Language:** English

**Abstract:** Accurate diagnosis of obstetric antiphospholipid syndrome (APS) is a prerequisite for optimal clinical management. The international consensus (revised Sapporo) criteria for obstetric APS do not include low positive anticardiolipin (aCL) and anti beta2 glycoprotein I (abeta<sub>2</sub>GPI) antibodies (< 99<sup>th</sup>centile) and/or certain clinical criteria such as two unexplained miscarriages, three non-consecutive miscarriages, late pre eclampsia, placental abruption, late premature birth, or two or more unexplained in vitro fertilisation failures. In this review we examine the available evidence to address the question of whether patients who exhibit non-criteria clinical and/or laboratory manifestations should be included within the spectrum of obstetric APS. Prospective and retrospective cohort studies of women with pregnancy morbidity, particularly recurrent pregnancy loss, suggest that elimination of aCL and/or IgM abeta<sub>2</sub>GPI, or low positive positive aCL or abeta<sub>2</sub>GPI from APS laboratory diagnostic criteria may result in missing the diagnosis in a sizeable number of women who could be regarded to have obstetric APS. Such prospective and retrospective studies also...
suggest that women with non-criteria obstetric APS may benefit from standard treatment for obstetric APS with low-molecular-weight heparin plus low-dose aspirin, with good pregnancy outcomes. Thus, non-criteria manifestations of obstetric APS may be clinically relevant, and merit investigation of therapeutic approaches. Women with obstetric APS appear to be at a higher risk than other women of pre-eclampsia, placenta-mediated complications and neonatal mortality, and also at increased long-term risk of thrombotic events. The applicability of these observations to outcomes in women with non-criteria obstetric APS remains to be determined.

**Publication type:** Journal: Review  
**Source:** EMBASE

6. Discovery of new biomarkers of idiopathic inflammatory myopathy  
**Citation:** Clinica Chimica Acta, April 2015, vol./is. 444/(117-125), 0009-8981;1873-3492 (April 05, 2015)  
**Author(s):** Lu X., Peng Q., Wang G.  
**Language:** English  
**Abstract:** Idiopathic inflammatory myopathies (IIMs) are a group of acquired diseases, characterized by immune-inflammatory processes primarily involving skeletal muscle. According to recent classification criteria, five major diseases have been identified: polymyositis (PM), dermatomyositis (DM), immune-mediated necrotizing myopathy (IMNM), juvenile idiopathic myositis (JIM) and sporadic inclusion body myositis (sIBM). Although the etiology of IIMs is still incompletely understood, there is much evidence supporting the involvement of genetic, immunological, and environmental factors. In recent years, many new biomarkers have been identified as useful indicators for diagnosis, disease subtypes, prognosis, or response to treatment of IIMs. This article reviews the new biomarkers in serum and muscle tissue, focusing on their pathogenic, diagnostic and prognostic value in IIM. We assigned value based on the categories of myositis specific autoantibodies, cytokines, and genetic markers.  
**Publication type:** Journal: Review  
**Source:** EMBASE  
**Full text:** Available Elsevier at Clinica Chimica Acta

7. Disease progression in systemic sclerosis-overlap syndrome is significantly different from limited and diffuse cutaneous systemic sclerosis  
**Citation:** Annals of the Rheumatic Diseases, April 2015, vol./is. 74/4(730-737), 0003-4967;1468-2060 (01 Apr 2015)  
**Language:** English  
**Abstract:** Background Systemic sclerosis (SSc)-overlap syndromes are a very heterogeneous and remarkable subgroup of SSC-patients, who present at least two connective tissue diseases (CTD) at the same time, usually with a specific autoantibody status. Objectives To determine whether patients, classified as overlap syndromes, show a disease course different from patients with limited SSc (lcSSc) or diffuse cutaneous SSc (dcSSc). Methods The data of 3240 prospectively included patients, registered in the database of the German Network for Systemic Scleroderma and followed between 2003 and 2013, were analysed. Results Among 3240 registered patients, 10% were diagnosed as SSc-overlap syndrome. Of these, 82.5% were female. SSc-overlap patients had a mean age of 48 +/-1.2 years and carried significantly more often 'other antibodies' (68.0%; p<0.0001), including anti-U1RNP, -PmScI, -Ro, -La, as well as anti-Jo-1 and -Ku antibodies. These patients developed musculoskeletal involvement earlier and more frequently (62.5%) than patients diagnosed as lcSSc (32.2%) or dcSSc (43.3%) (p<0.0001). The onset of lung fibrosis and heart involvement in SSc-overlap patients was significantly earlier than in patients with lcSSc and occurred later than in patients with dcSSc. Oesophagus, kidney and PH progression was similar to lcSSc patients, whereas dcSSc patients had a significantly earlier onset. Conclusions These data support the concept that SSc-overlap syndromes should be regarded as a separate SSc subset, distinct from lcSSc and dcSSc, due to a different progression of the disease, different proportional distribution of specific autoantibodies, and of different organ involvement.  
**Publication type:** Journal: Article  
**Source:** EMBASE  
**Full text:** Available Highwire Press at EULAR Meeting Abstracts
8. Effectiveness of different styles of massage therapy in fibromyalgia: A systematic review and meta-analysis

Citation: Manual Therapy, April 2015, vol./is. 20/2(257-264), 1356-689X;1532-2769 (01 Apr 2015)

Author(s): Yuan S.L.K., Matsutani L.A., Marques A.P.

Language: English

Abstract: The systematic review aimed to evaluate the effectiveness of massage in fibromyalgia. An electronic search was conducted at MEDLINE, SCiELO, EMBASE, ISI, PEDro, SPORTDiscus, CINAHL, Cochrane CENTRAL and LILACS (Jan 1990-May 2013). Ten randomized and non-randomized controlled trials investigating the effects of massage alone on symptoms and health-related quality of life of adult patients with fibromyalgia were included. Two reviewers independently screened records, examined full-text reports for compliance with the eligibility criteria, and extracted data. Meta-analysis (pooled from 145 participants) shows that myofascial release had large, positive effects on pain and medium effects on anxiety and depression at the end of treatment, in contrast with placebo; effects on pain and depression were maintained in the medium and short term, respectively. Narrative analysis suggests that: myofascial release also improves fatigue, stiffness and quality of life; connective tissue massage improves depression and quality of life; connective tissue massage regarding stiffness, depression and quality of life; Shiatsu improves pain, pressure pain threshold, fatigue, and quality of life; and Swedish massage does not improve outcomes. There is moderate evidence that myofascial release is beneficial for fibromyalgia symptoms. Limited evidence supports the application of connective tissue massage and Shiatsu. Manual lymphatic drainage may be superior to connective tissue massage, and Swedish massage may have no effects. Overall, most styles of massage therapy consistently improved the quality of life of fibromyalgia patients.

Publication type: Journal: Review

Source: EMBASE

Full text: Available Manual Therapy at Manual Therapy


Citation: Current Opinion in Rheumatology, March 2015, vol./is. 27/2(139-146), 1040-8711;1531-6963 (06 Mar 2015)

Author(s): Khanna P.P., Fitzgerald J.

Language: English

Abstract: PURPOSE OF REVIEW: There have been several guidelines on the management of gout over the last decade; however, inconsistencies between them create confusion for practitioners. This review highlights areas of agreement between guidelines and discusses data where disagreements exist. RECENT FINDINGS: For acute gout, the guidelines agree that anti-inflammatory treatment should start as soon as possible, preferably within 24 hours. Older guidelines preferred NSAIDs or colchicine over steroids, but newer ones leave the choice of agent to the physician. For colchicine, all guidelines recommend using low dose. Intra-articular, oral or intramuscular steroids are all described as effective. For management of hyperuricemia, indications for initiating urate-lowering therapy (ULT) have become more inclusive over the years by requiring lower burden of disease severity or including patient comorbidities. Probenecid has fallen out of favour with most guidelines favouring allopurinol over febuxostat. Although there is a disagreement about timing of initiation for ULT, guidelines recommend treating to target of serum urate (sUA) less than 6mg/dl, and less than 5mg/dl for patients with more severe disease. Concurrent anti-inflammatory prophylaxis has gained strong support over the years. SUMMARY: Most guidelines are in agreement with recommendations for management of gout and most changes have been directional and evolutionary.

Publication type: Journal: Review

Source: EMBASE

Full text: Available Current opinion in rheumatology at Current Opinion in Rheumatology

10. Exercise, not to exercise, or how to exercise in patients with chronic pain? Applying science to practice

Citation: Clinical Journal of Pain, February 2015, vol./is. 31/2(108-114), 0749-8047;1536-5409 (21 Feb 2015)

Author(s): Daenen L., Varkey E., Kellmann M., Nijs J.
Exercise is an effective treatment strategy in various chronic musculoskeletal pain disorders, including chronic neck pain, osteoarthritis, headache, fibromyalgia and chronic low back pain. Although exercise can benefit those with chronic pain (CP), some patients (eg, those with fibromyalgia, myalgic encephalomyelitis/chronic fatigue syndrome and chronic whiplash associated disorders) encounter exercise as a pain inducing stimulus and report symptom flares due to exercise. OBJECTIVES: This paper focuses on the clinical benefits and detrimental effects of exercise in patients with CP. It summarizes the positive and negative effects of exercise therapy in migraine and tension-type headache and provides an overview of the scientific evidence of dysfunctional endogenous analgesia during exercise in patients with certain types of CP. Further, the paper explains the relationship between exercise and recovery highlighting the need to address recovery strategies as well as exercise regimes in the rehabilitation of these patients. The characteristics, demands and strategies of adequate recovery to compensate stress from exercise and return to homeostatic balance will be described. METHODS:: narrative review. RESULTS:: Exercise is shown to be effective in the treatment of chronic tension-type headache and migraine. Aerobic exercise is the best option in migraine prophylaxis, whereas specific neck and shoulder exercises is a better choice in treating chronic tension-type headache. Besides the consensus that exercise therapy is beneficial in the treatment of CP, the lack of endogenous analgesia in some CP disorders should not be ignored. Clinicians should account for this when treating CP patients. Furthermore, optimizing the balance between exercise and recovery is of crucial merit in order to avoid stress-related detrimental effects and achieve optimal functioning in patients with CP. CONCLUSION:: Exercise therapy has found to be beneficial in CP, but it should be appropriately and individually tailored with emphasis on prevention of symptom flares and applying adequate recovery strategies.

Publication type: Journal: Article
Source: EMBASE

11. Gastrointestinal events in at-risk patients starting non-steroidal anti-inflammatory drugs (NSAIDs) for rheumatic diseases: The EVIDENCE study of European routine practice

Citation: Annals of the Rheumatic Diseases, April 2015, vol./is. 74/4(675-681), 0003-4967;1468-2060 (01 Apr 2015)

Author(s): Lanas A., Boers M., Nuevo J.

Language: English

Abstract: Objectives: Data concerning rates of gastrointestinal (GI) events in non-steroidal anti-inflammatory drug (NSAID) users derive mainly from clinical trials. The EVIDENCE study quantified the incidence of symptomatic uncomplicated and/or complicated GI events in at-risk European patients treated with NSAIDs in real-life practice. Methods: This non-interventional study assessed 4144 adults with at least one GI risk factor who recently initiated NSAID therapy for osteoarthritis (85%), rheumatoid arthritis (11%), ankylosing spondylitis (3%) or a combination (1%). Patient characteristics and medical history were collected from medical records. GI events (upper and lower) were recorded at in-clinic visits during 6 months' follow-up. Results: Mean time on index NSAID at enrolment was 33 days. The incidence (per 100 person-years) was 18.5 per 100 person-years for uncomplicated GI events and 0.7 per 100 person-years for complicated GI events. Upper GI events were far more common (12%) than lower GI events (1%) during study follow-up (median 182 days (range 61-320)). Other reported rates for cardiovascular, anaemia or non-GI events were much less frequent. A minority (28%) of patients had ongoing proton pump inhibitor use at enrolment, with strong variation by practice and country. Conclusions: EVIDENCE is the largest prospective study of the real-life management of European patients treated with NSAIDs for rheumatic diseases and at increased GI risk. It shows that GI events from the upper GI tract are far more common than those from the lower GI tract. It also shows adherence to guidelines for gastroprotection is generally low.

ClinicalTrials.gov identifier: NCT01176682.

Publication type: Journal: Article
Source: EMBASE
Full text: Available Highwire Press at EULAR Meeting Abstracts
Full text: Available Highwire Press at Annals of the Rheumatic Diseases

12. Geranylgeranylacetone protects against small-intestinal injuries induced by diclofenac in patients with rheumatic diseases: A prospective randomized study

Citation: Digestive and Liver Disease, April 2015, vol./is. 47/4(280-284), 1590-8658;1878-3562 (01 Apr 2015)
Author(s): Xiong L., Huang X., Li L., Yang X., Liang L., Zhan Z., Ye Y., Chen M.

Language: English

Abstract: Background: We aimed to explore the effect of geranylgeranylacetone on small-intestinal mucosal injuries induced by diclofenac sodium in patients with rheumatic diseases. Methods: The patients were randomly divided into two groups in our prospective study. The patients in the geranylgeranylacetone group received diclofenac sodium plus geranylgeranylacetone, and those in the control group received only diclofenac sodium for 12 weeks. We examined small-intestinal mucosal injuries using capsule endoscopy before and after treatment. Results: There were no significant differences between geranylgeranylacetone (n=21, male: 42.9%; age: 31.0±9.0 year) and control (n=19, male: 68.4%; age: 31.0±11.0 year) groups in terms of the numbers of patients with petechiae/red spots, denuded areas and mucosal breaks at baseline capsule endoscopy. After treatment, the numbers of patients with denuded areas (chi<sup>2</sup>=0.000, P=1.000) and mucosal breaks (chi<sup>2</sup>=1.750, P=0.186) did not increase in the geranylgeranylacetone group. However, the numbers of patients with petechiae/red spots (chi<sup>2</sup>=5.216, P=0.022), denuded areas (chi<sup>2</sup>=8.686, P=0.003) and mucosal breaks (chi<sup>2</sup>=7.795, P=0.005) increased after treatment in the control groups. Geranylgeranylacetone improved both the Lewis score (Z=-2.459, P=0.017) and degree (chi<sup>2</sup>=5.414, P=0.020) on capsule endoscopy 12 weeks later. Conclusions: In patients with rheumatic diseases, geranylgeranylacetone is effective for protecting against small-intestinal mucosal injuries induced by diclofenac sodium.

Publication type: Journal: Article

Source: EMBASE

13. Giant cell arteritis restricted to the limb arteries: An overlooked clinical entity

Citation: Autoimmunity Reviews, April 2015, vol./is. 14/4(352-357), 1568-9972;1873-0183 (01 Apr 2015)

Author(s): Berti A., Campochiaro C., Cavalli G., Pepe G., Praderio L., Sabbadini M.G., Dagna L.

Language: English

Abstract: Objective: Giant cell arteritis (GCA) is a systemic vasculitis typically affecting temporal arteries. In at least 15% of cases, GCA also features inflammation of the aorta and its primary branches. Large-vessel inflammation restricted to proximal limb arteries in the absence of temporal and aortic involvement (Limb Restricted, LR) is rare and not well described in literature. Hence, we aim to characterize this neglected clinical entity. Methods: We describe a series of three cases of LR-GCA. All patients were older than 50. years, had increased erythrocyte sedimentation rate (ESR), normal cholesterol and triglycerides serum levels, negative temporal artery biopsy, suggestive F-18 fluorodeoxyglucose positron emission tomography (FDG-PET) findings, and responded to immunosuppressive therapy. We also reviewed all published cases of LR-GCA (76 cases), for a total of 79 patients. Results: Limb claudication was reported in 87% of the patients, and cranial symptoms and polymyalgia rheumatica in 20%. Constitutional symptoms were never reported. Median ESR levels were 66.5 mm/1. h. Upper and lower limb arteries were involved in 86% and 9% of the patients respectively, and the remaining 5% had simultaneous upper and lower limb vessel involvement. Conventional angiography was performed in 63% of the cases, color-doppler ultrasound in 20%, FDG-PET in 14%, and computed tomography angiography in 3%. Conclusion: If temporal biopsy and aortic imaging are negative for GCA in patients older than 50. years with bilateral limb claudication, elevated ESR, and suggestive vascular radiological findings, LR-GCA should be suspected. Upper limb arteries are more frequently involved. Since constitutional symptoms are typically absent in LR-GCA, differential diagnosis with atherosclerotic plaques may be challenging.

Publication type: Journal: Review

Source: EMBASE

14. Hyperuricemia, Gout, and Cardiovascular Disease: An Update

Citation: Current Rheumatology Reports, 2015, vol./is. 17/3, 1523-3774;1534-6307 (2015)

Author(s): Abeles A.M.

Language: English

Abstract: Across the globe, both gout and hyperuricemia have become increasingly common over the last few decades. The burden of gouty disease is made heavier by its association with several comorbid conditions, including hypertension, cardiovascular disease, and chronic kidney disease. Accruing evidence from prospective studies suggests that gout is an independent risk factor for developing cardiovascular disease and for higher cardiovascular mortality. While asymptomatic hyperuricemia does not seem to be an independent risk factor for cardiovascular disease, increasing data implicates hyperuricemia as a risk factor for developing incidental
hypertension. Important questions that remain unanswered include whether addressing asymptomatic hyperuricemia forestalls the onset of hypertension, and whether treating gout with urate-lowering agents improves cardiovascular outcomes. This article reviews the most recent data regarding the relationship between hyperuricemia, gout, hypertension, and cardiovascular disease, as well as emerging evidence as to whether treatment of hyperuricemia and gout improves cardiovascular outcomes.

Publication type: Journal: Review
Source: EMBASE

15. Impact of rheumatic diseases on oral health and quality of life

Citation: Oral Diseases, April 2015, vol./is. 21/3(342-348), 1354-523X;1601-0825 (01 Apr 2015)
Author(s): Ahola K., Saarinen A., Kuuliala A., Leirisalo-Repo M., Murtomaa H., Meurman J.H.
Language: English

Abstract: Objective: We investigated the effects of rheumatic diseases on oral symptoms, health habits, and quality of life in subjects with and without rheumatic diseases. The hypothesis was that patients with rheumatic diseases have more oral symptoms impairing their quality of life than healthy controls. Methods: A questionnaire was mailed to a random sample of 1500 members of the Finnish Rheumatism Association, including those with and without rheumatic diseases. We focused on symptoms of the mouth and temporomandibular area, and health habits. Oral Health Impact Profile (OHIP14) was used to evaluate the oral health-related quality of life. We analyzed differences between subjects with and without rheumatic diseases, controlled for age, gender, smoking, and non-rheumatic chronic diseases. Results: Completed questionnaires were received from 995 participants (response rate 66%). Of them, 564 reported rheumatic disease, 431 were used as controls. The patients reported significantly more all orofacial symptoms than controls. Severe dry mouth was reported by 19.6% of patients and 2.9% of controls (P < 0.001), and temporomandibular joint symptoms by 59.2% and 27.2% (P < 0.001), respectively. In the OHIP-14 questionnaire, the mean total score was significantly higher in patients (8.80 +/- 11.15) than in controls (3.93 +/- 6.60; P < 0.001). Conclusion: The study hypothesis was confirmed by showing that the patients with rheumatic diseases reported oral discomfort and reduced quality of life more often when compared with controls.

Publication type: Journal: Article
Source: EMBASE

16. Improving the quality of care of patients with rheumatic disease using patient-centric electronic redesign software

Citation: Arthritis Care and Research, April 2015, vol./is. 67/4(546-553), 2151-464X;2151-4658 (01 Apr 2015)
Author(s): Newman E.D., Lerch V., Billet J., Berger A., Kirchner H.L.
Language: English

Abstract: Objective Electronic health records (EHRs) are not optimized for chronic disease management. To improve the quality of care for patients with rheumatic disease, we developed electronic data capture, aggregation, display, and documentation software. Methods The software integrated and reassembled information from the patient (via a touchscreen questionnaire), nurse, physician, and EHR into a series of actionable views. Core functions included trends over time, rheumatology-related demographics, and documentation for patient and provider. Quality measures collected included patient-reported outcomes, disease activity, and function. The software was tested and implemented in 3 rheumatology departments, and integrated into routine care delivery. Post-implementation evaluation measured adoption, efficiency, productivity, and patient perception. Results Over 2 years, 6,725 patients completed 19,786 touchscreen questionnaires. The software was adopted for use by 86% of patients and rheumatologists. Chart review and documentation time trended downward, and productivity increased by 26%. Patient satisfaction, activation, and adherence remained unchanged, although pre-implementation values were high. A strong correlation was seen between use of the software and disease control (weighted Pearson’s correlation coefficient 0.5927, P = 0.0095), and a relative increase in patients with low disease activity of 3% per quarter was noted. Conclusion We describe innovative software that aggregates, stores, and displays information vital to improving the quality of care for patients with chronic rheumatic disease. The software was well-adopted by patients and providers. Post-implementation, significant improvements in quality of care, efficiency of care, and productivity were demonstrated.

Publication type: Journal: Article
Source: EMBASE
17. Increased 30-day and 1-year mortality rates and lower coronary revascularisation rates following acute myocardial infarction in patients with autoimmune rheumatic disease

**Citation:** Arthritis Research and Therapy, February 2015, vol./is. 17/1, 1478-6354;1478-6362 (February 27, 2015)

**Author(s):** Van Doornum S., Bohensky M., Tacey M.A., Brand C.A., Sundararajan V., Wicks I.P.

**Language:** English

**Abstract:** Introduction: It is now well-recognised that patients with autoimmune rheumatic disease (AIRD) have a predisposition to cardiovascular disease that results in increased morbidity and mortality. Following myocardial infarction (MI), patients with rheumatoid arthritis have been shown to have an increased case fatality rate; however, this has not been demonstrated in other forms of AIRD. The aim of this study was to compare case fatality rates following a first MI in patients with AIRD versus the general population. The secondary aim was to compare revascularisation treatment following MI in patients with AIRD versus the general population. Methods: A retrospective cohort study using two population-based linked databases was undertaken. Cases of first MI from July 2001 to June 2007 were identified based on International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Australian Modification, codes. Thirty-day and one-year mortality rates were calculated (all-cause and cardiovascular causes of death). Logistic regression models were fitted to calculate the odds of mortality by AIRD status with adjustment for relevant characteristics. Results: There were 79,390 individuals with a first MI, of whom 1,409 (1.8%) had AIRD. After adjusting for relevant covariates, the odds ratio (OR) for 30-day cardiovascular mortality in patients with AIRD was 1.44 (95% confidence interval (CI): 1.25 to 1.66), and the OR for 12-month cardiovascular mortality was 1.71 (95% CI: 1.51 to 1.94). The 90-day adjusted odds of percutaneous transluminal coronary angioplasty and coronary artery bypass graft were significantly lower in the AIRD group compared with controls (OR: 0.81, 95% CI: 0.70 to 0.94, and OR: 0.52, 95% CI: 0.39 to 0.69, respectively). Conclusions: We identified a higher risk-adjusted mortality rate for the majority of patients with AIRD at 30 days and 12 months after first MI. We also identified lower post-MI revascularisation rates in the AIRD group, suggesting there may be current gaps in cardiovascular treatment for patients with AIRD.

**Publication type:** Journal: Article

**Source:** EMBASE

**Full text:** Available Arthritis research & therapy at Arthritis Research and Therapy

18. Increased risk of vascular disease associated with gout: A retrospective, matched cohort study in the UK Clinical Practice Research Datalink

**Citation:** Annals of the Rheumatic Diseases, April 2015, vol./is. 74/4(642-647), 0003-4967;1468-2060 (01 Apr 2015)

**Author(s):** Clarson L.E., Hider S.L., Belcher J., Heneghan C., Roddy E., Mallen C.D.

**Language:** English

**Abstract:** Objectives To determine whether gout increases risk of incident coronary heart disease (CHD), cerebrovascular (CVD) and peripheral vascular disease (PVD) in a large cohort of primary care patients with gout, since there have been no such large studies in primary care. Methods A retrospective cohort study was performed using data from the Clinical Practice Research Datalink (CPRD). Risk of incident CHD, CVD and PVD was compared in 8386 patients with an incident diagnosis of gout, and 39 766 age, sex and registered general practitioner matched controls, all aged over 50 years and with no prior vascular history, in the 10 years following incidence of gout, or matched index date (baseline). Multivariable Cox Regression was used to estimate HRs and covariates included sex and baseline measures of age, Body Mass Index, smoking, alcohol consumption, Charlson comorbidity index, history of hypertension, hyperlipidaemia, chronic kidney disease, statin use and aspirin use. Results Multivariable analysis showed men were at increased risk of any vascular event (HRs (95% CIs)) HR 1.06 (1.01 to 1.12), any CHD HR 1.08 (1.01 to 1.15) and PVD HR 1.18 (1.01 to 1.38), while women were at increased risk of any vascular event, HR 1.25 (1.15 to 1.35), any CHD HR 1.25 (1.12 to 1.39), and PVD 1.89 (1.50 to 2.38)) but not any CVD. Conclusions In this cohort of over 50s with gout, female patients with gout were at greatest risk of incident vascular events, even after adjustment for vascular risk factors, despite a higher prevalence of both gout and vascular disease in men. Further research is required to establish the reason for this sex difference.

**Publication type:** Journal: Article

**Source:** EMBASE

**Full text:** Available Highwire Press at EULAR Meeting Abstracts

**Full text:** Available Highwire Press at Annals of the Rheumatic Diseases
19. Is ultrasound changing the way we understand rheumatology? Including ultrasound examination in the classification criteria of polymyalgia rheumatica and gout

**Citation:** Medical Ultrasonography, 2015, vol./is. 17/1(97-103), 1844-4172;2066-8643 (2015)

**Author(s):** Codreanu C., Enache L.

**Language:** English

**Abstract:** Ultrasonography (US) is widely used in the diagnosis of rheumatic conditions, and its value for the classification criteria of rheumatic diseases has been recently suggested. According to the EULAR/ACR provisional criteria for polymyalgia rheumatica, adding US to the clinical and serological features will significantly improve the sensitivity of proposed criteria. The ability of high resolution US to detect crystalline deposits of monosodium urate in joints and soft tissues is well recognized. For the first time, the new 2014 ACR/EULAR set of proposed criteria for gout includes advanced imaging techniques for the detection of disease: US and dual-energy computed tomography. Due to low costs and affordability, use of US evaluation for patients with suspected gout will increase both specificity and sensibility of classification criteria. The recent inclusion of US in the classification criteria of various rheumatic diseases, such as PMR and gout, implies that this imaging technique is not only useful as a valued diagnostic tool for individual cases, but also on a larger scale, it will improve doctors’ ability to classify diseases. Its use is thus changing our understanding of rheumatic diseases allowing further advances in research and clinical practice.

**Publication type:** Journal: Review

**Source:** EMBASE

**Full text:** Available *ProQuest* at [Medical Ultrasonography](#)

20. Localized scleroderma: Clinical spectrum and therapeutic update

**Citation:** Anais Brasileiros de Dermatologia, 2015, vol./is. 90/1(62-73), 0365-0596;1806-4841 (2015)

**Author(s):** Careta M.F., Romiti R.

**Language:** English

**Abstract:** Scleroderma is a rare connective tissue disease that is manifested by cutaneous sclerosis and variable systemic involvement. Two categories of scleroderma are known: systemic sclerosis, characterized by cutaneous sclerosis and visceral involvement, and localized scleroderma or morphea which classically presents benign and self-limited evolution and is confined to the skin and/or underlying tissues. Localized scleroderma is a rare disease of unknown etiology. Recent studies show that the localized form may affect internal organs and have variable morbidity. Treatment should be started very early, before complications occur due to the high morbidity of localized scleroderma. In this review, we report the most important aspects and particularities in the treatment of patients diagnosed with localized scleroderma.

**Publication type:** Journal: Article

**Source:** EMBASE

21. New medications in development for the treatment of hyperuricemia of gout

**Citation:** Current Opinion in Rheumatology, March 2015, vol./is. 27/2(164-169), 1040-8711;1531-6963 (06 Mar 2015)

**Author(s):** Diaz-Torne C., Perez-Herrero N., Perez-Ruiz F.

**Language:** English

**Abstract:** PURPOSE OF REVIEW: To update recent developments in medications targeting hyperuricemia, but not including medications recently labelled in the European Union and the United States. RECENT FINDINGS: A new xanthine oxidase inhibitor, Topiloric (Fujiyakuhin Co., Ltd. Japan) Uriadec (Sanwa Kagaku Kenkyusho Co., Ltd. Japan), has been developed and labelled in Japan. An inhibitor of purine nucleoside phosphorylase, Ulodesine, is in development in combination with allopurinol. The rest of the medications in the pipeline for hyperuricemia are targeting renal transporters of uric acid, mainly URAT1 and OAT4, acting as uricosuric agents. Most of them, such as lesinurad and arhalofenate, are being tested in trials in combination with allopurinol and febuxostat. The most potent RDEA3170 is being tested in monotherapy, but also associated with febuxostat. Recently, medications showing dual activity, inhibiting both xanthine oxidoreductase and URAT1, have been communicated or started exploratory clinical trials. There is no report of medications targeting other transporters such as Glut9 or ABCG2. SUMMARY: There are a number of medications in the pipeline targeting hyperuricemia, mostly uricosurics in combination with xanthine oxidase inhibitors, but some targeting both xanthine oxidoreductase and URAT1. Increasing the number of available medications will ensure proper control of hyperuricemia to target serum urate levels in the near future for most, if not all, patients with hyperuricemia.
22. Presence of gout is associated with increased prevalence and severity of knee osteoarthritis among older men

Citation: Journal of Clinical Rheumatology, March 2015, vol./is. 21/2(63-71), 1076-1608;1536-7355 (12 Mar 2015)
Author(s): Howard R.G., Samuels J., Gyftopoulos S., Krasnokutsky S., Leung J., Swearingen C.J., Pillinger M.H.
Language: English
Abstract: Background: Gout and osteoarthritis (OA) are the most prevalent arthritides, but their relationship is neither well established nor well understood. Objectives: We assessed whether a diagnosis of gout or asymptomatic hyperuricemia (AH) is associated with increased prevalence/severity of knee OA. Methods: One hundred nineteen male patients aged 55 to 85 years were sequentially enrolled from the primary care clinics of an urban Veterans Affairs hospital, assessed and categorized into 3 groups: gout (American College of Rheumatology Classification Criteria), AH (serum urate >6.8 mg/dL, no gout), and control (serum urate <6.8 mg/dL, no gout). Twenty-five patients from each group subsequently underwent formal assessment of knee OA presence and severity (American College of Rheumatology Clinical/Radiographic Criteria, Kellgren-Lawrence grade). Musculoskeletal ultrasound was used to detect monosodium urate deposition at the knees and first metatarsophalangeal joints. Results: The study showed 68.0% of gout, 52.0% of AH, and 28.0% of age-matched control subjects had knee OA (gout vs control, P = 0.017). Odds ratio for knee OA in gout versus control subjects was 5.46 prior to and 3.80 after adjusting for body mass index. Gout subjects also had higher Kellgren-Lawrence grades than did the control subjects (P = 0.001). Subjects with sonographically detected monosodium urate crystal deposition on cartilage were more likely to have OA than those without (60.0 vs 27.5%, P = 0.037), with crystal deposition at the first metatarsophalangeal joints correlating most closely with OA knee involvement. Conclusions: Knee OA was more prevalent in gout patients versus control subjects and intermediate in AH. Knee OA was more severe in gout patients versus control subjects.

23. Rising burden of gout in the UK but continuing suboptimal management: A nationwide population study

Citation: Annals of the Rheumatic Diseases, April 2015, vol./is. 74/4(661-667), 0003-4967;1468-2060 (01 Apr 2015)
Author(s): Kuo C.-F., Grainge M.J., Mallen C., Zhang W., Doherty M.
Language: English
Abstract: Objectives: To describe trends in the epidemiology of gout and patterns of urate-lowering treatment (ULT) in the UK general population from 1997 to 2012. Methods: We used the Clinical Practice Research Datalink to estimate the prevalence and incidence of gout for each calendar year from 1997 to 2012. We also investigated the pattern of gout management for both prevalent and incident gout patients. Results: In 2012, the prevalence of gout was 2.49% (95% CI 2.48% to 2.51%) and the incidence was 1.77 (95% CI 1.73 to 1.81) per 1000 person-years. Prevalence and incidence both were significantly higher in 2012 than in 1997, with a 63.9% increase in prevalence and 29.6% increase in incidence over this period. Regions with highest prevalence and incidence were the North East and Wales. Among prevalent gout patients in 2012, only 48.48% (95% CI 48.08% to 48.89%) were being consulted specifically for gout or treated with ULT and of these 37.63% (95% CI 37.28% to 38.99%) received ULT. In addition, only 18.6% (95% CI 17.6% to 19.6%) of incident gout patients received ULT within 6 months and 27.3% (95% CI 26.1% to 28.5%) within 12 months of diagnosis. The management of prevalent and incident gout patients remained essentially the same during the study period, although the percentage of adherent patients improved from 28.28% (95% CI 27.33% to 29.26%) in 1997 to 39.66% (95% CI 39.11% to 40.22%) in 2012. Conclusions: In recent years, both the prevalence and incidence of gout have increased significantly in the UK. Suboptimal use of ULT has not changed between 1997 and 2012. Patient adherence has improved during the study period, but it remains poor.
24. Risk of falls in patients with ankylosing spondylitis

**Citation:** Journal of Clinical Rheumatology, March 2015, vol./is. 21/2(76-80), 1076-1608;1536-7355 (12 Mar 2015)

**Author(s):** Dursun N., Sarikaya S., Ozdolap S., Dursun E., Zateri C., Altan L., Birtane M., Akgun K., Revzani A., Aktas I., Tastekin N., Celiker R.

**Language:** English

**Abstract:** Background: Risk of vertebral fractures is increased in patients with ankylosing spondylitis (AS). The underlying mechanisms for the elevated fracture risk might be associated with bone and fall-related risks. The aims of this study were to evaluate the risk of falls and to determine the factors that increase the risk of falls in AS patients. Methods: Eighty-ninewomen, 217 men, a total of 306 AS patientswith a mean age of 40.1 +/- 11.5 years from 9 different centers in Turkey were included in the study. Patients were questioned regarding history of falls within the last 1 year. Their demographics, disease characteristics including Bath AS Disease Activity Index, Bath AS Metrology Index (BASMI), Bath AS Functional Index (BASFI), and risk factors for falls were recorded. The Short Physical Performance Battery (SPPB) test was used for evaluation of static and dynamic balance. Erythrocyte sedimentation rate, C-reactive protein, and 25-hydroxyvitamin D levels were measured. Results: Forty of 306 patients reported at least 1 fall in the recent 1 year. The patients with history of falls had higher mean age and longer disease duration than did nonfallers (P = 0.001). In addition, these patients' BASMI and BASFI values were higher than those of nonfallers (P = 0.002; P = 0.000, respectively). We found that the patients with history of falls had lower SPPB scores (P = 0.000). We also found that the number of falls increased with longer disease duration and older age (R = 0.117 [P = 0.041] and R = 0.160 [P = 0.005]). Our results show that decreased SPPB scores were associated with increased number of falls (R = 0.183, P = 0.006). Statistically significant correlations were found between number of falls and AS-related lost job (R = 0.140, P = 0.014), fear of falling (R = 0.316, P = 0.000), hip involvement (R = 0.112, P = 0.05), BASMI (R = 0.234, P = 0.000), and BASFI (R = 0.244, P = 0.000). Conclusions: Assessment of pain, stiffness, fatigue, and lower-extremity involvement as well as asking for a history of falls will highlight those at high risk for further falls. In addition to the general exercise program adopted for all patients, we suggest that a balance rehabilitation program should be valuable for the patients with risk factors for fall. Exercise may improve fear of falling and BASFI and BASMI scores. However, further study is needed to investigate these hypotheses. We believe that clinicians should train and support the patients via reducing fear of falls and maintaining good posture and functional capacity.

**Publication type:** Journal: Article

**Source:** EMBASE


**Citation:** Autoimmunity Reviews, May 2015, vol./is. 14/5(376-386), 1568-9972;1873-0183 (01 May 2015)


**Language:** English

**Abstract:** Throughout the last decade, increasing awareness has been raised on issues related to reproduction in rheumatic diseases including basic research to clarify the important role of estrogens in the etiology and pathophysiology of immune/inflammatory diseases. Sub- or infertility is a heterogeneous condition that can be related to immunological mechanisms, to pregnancy loss, to disease burden, to therapy, and to choices in regard to family size. Progress in reproductive medicine has made it possible for more patients with rheumatic disease to have children. Active disease in women with rheumatoid arthritis (RA) affects their children's birth weight and may have long-term effects on their future health status. Pregnancy complications as preeclampsia and intrauterine growth restriction are still increased in patients with systemic lupus erythematosus (SLE) and antiphospholipid syndrome (APS), however, biomarkers can monitor adverse events, and several new therapies may improve outcomes. Pregnancies in women with APS remain a challenge, and better therapies for the obstetric APS are needed. New prospective studies indicate improved outcomes for pregnancies in women with rare diseases like systemic sclerosis and vasculitis. TNF inhibitors hold promise for maintaining remission in rheumatological patients and may be continued at least in the first half of pregnancy. Pre-conceptional counseling and interdisciplinary management of pregnancies are essential for ensuring optimal pregnancy outcomes.

**Publication type:** Journal: Article
26. Subclinical atherosclerosis and peripheral vascular disease in systemic sclerosis patients: Relation to potential risk factors

Citation: Egyptian Rheumatologist, January 2015, vol./is. 37/1(23-28), 1110-1164;2090-2433 (01 Jan 2015)

Author(s): Farag N.A., El Serougy E.M., Metawee S.A., El Azizi H.S.

Language: English

Abstract: Aim of the work: To measure the extent of subclinical atherosclerosis in patients with systemic sclerosis, and to evaluate any potential vascular risk factors in these patients. Patients and methods: This study included 30 patients with systemic sclerosis diagnosed according to the American college of rheumatology criteria and 20 healthy individuals were also included as a control group. Non-invasive vascular tests including; carotid duplex scanning measuring common carotid arteries (CCA) intima-media thickness (IMT), and ankle brachial pressure index (ABPI) were performed. Traditional vascular risk factors such as blood pressure, blood sugar, lipid profiles, steroid usage and other immunosuppressive medications were assessed. Results: The mean IMT of CCA was higher in systemic sclerosis patients (right 0.67. +/- 0.11. mm, left 0.67. +/- 0.12. mm) when compared with the control group (right 0.48. +/- 0.2. mm, left 0.54. +/- 0.13. mm) (p<. 0.001). Carotid plaques were found in 4 SSc patients. Mean IMT was correlated with patients’ age (p<. 0.001), disease duration (p<. 0.001), systolic blood pressure (p<. 0.05), and dyslipidemia (p<. 0.01). Ankle brachial pressure index (ABPI) was significantly lower in SSc patients (0.94. +/- 0.13) when compared with controls (1.16. +/- 0.12) (p<. 0.001). No difference was found between limited (n= 25) and diffuse (n= 5) disease subtypes in mean IMT, nor in mean ABPI. There was no significant correlation between mean IMT and steroid dose or other immunosuppressive intake. Conclusion: There is an increased risk of subclinical atherosclerosis and peripheral arterial disease in SSc patients. Increased systolic blood pressure, dyslipidemia, long disease duration and older age were possible risk factors.

Publication type: Journal: Article

Source: EMBASE

27. T cells as a therapeutic target in SLE

Citation: Lupus, April 2015, vol./is. 24/(351-363), 0961-2033;1477-0962 (25 Apr 2015)

Author(s): Comte D., Karampetsou M.P., Tsokos G.C.

Language: English

Abstract: Systemic lupus erythematosus (SLE) is a multisystem autoimmune disease characterized by a loss of tolerance to multiple endogenous antigens. SLE etiology remains largely unknown, despite recent insight into the immunopathogenesis of the disease. T cells are important in the development of the disease by amplifying the immune response and contributing to organ damage. Aberrant signaling, cytokine secretion, and tissue homing displayed by SLE T cells have been extensively studied and the underlying pathogenic molecular mechanisms are starting to be elucidated. T-cell-targeted treatments are being explored in SLE patients. This review is an update on the T-cell abnormalities and related therapeutic options in SLE.

Publication type: Journal: Article

Source: EMBASE

Full text: Available Lupus at Lupus

28. The effects of gluten-free diet versus hypocaloric diet among patients with fibromyalgia experiencing gluten sensitivity symptoms: Protocol for a pilot, open-label, randomized clinical trial

Citation: Contemporary Clinical Trials, January 2015, vol./is. 40/(193-198), 1551-7144;1559-2030 (January 01, 2015)


Language: English

Abstract: Background: Fibromyalgia is a chronic musculoskeletal pain syndrome characterized by a broad spectrum of manifestations. Patients with fibromyalgia frequently suffer from manifestations similar to those experienced by patients with gluten-related disorders raising the possibility that some patients with fibromyalgia could suffer from underlying gluten sensitivity. Objective: This study aims to assess whether avoiding gluten among patients with fibromyalgia and gluten sensitivity is beneficial. Methods: Adult patients with fibromyalgia presenting gluten sensitivity symptoms are randomly allocated to receive gluten-free diet or hypocaloric diet for
24. weeks. The primary outcome measure is the mean change in the number of experienced gluten sensitivity symptoms. Secondary outcome measures include the mean changes in the body mass index, Revised Fibromyalgia Impact Questionnaire, Pittsburgh Sleep Quality Index, Brief Pain Inventory, Beck Depression Inventory-II, State-Trait Anxiety Inventory, Short-Form Health Survey and Patient Global Impression Scale of Severity. Other secondary outcome measures include the frequency of potential adverse events and the proportion of responders according to the Patient Global Impression Scale of Improvement. Discussion: Previous studies assessing dietary interventions in fibromyalgia primarily evaluated their effects on the severity and impact of fibromyalgia symptoms and pain. The current study is the first to evaluate the effects of gluten-free diet on the gluten sensitivity symptoms experienced by patients with fibromyalgia. The results of this study will contribute to a better understanding of the potential role of gluten sensitivity in fibromyalgia.

Publication type: Journal: Article
Source: EMBASE

29. Value and goals of treat-to-target in systemic lupus erythematosus: Knowledge and foresight
Citation: Lupus, April 2015, vol./is. 24/(507-515), 0961-2033;1477-0962 (25 Apr 2015)
Author(s): Doria A., Gatto M., Iaccarino L., Punzi L.
Language: English
Abstract: Treat-to-target is a therapeutic strategy aimed at improving disease outcome through the achievement of shared treatment goals, which has dramatically ameliorated the prognosis of widespread disorders, such as hypertension or diabetes. Conversely, efforts to delineate treat-to-target in systemic lupus erythematosus (SLE) have failed in pinpointing common goals and treatment strategies, probably because of disease heterogeneity and lack of measurable biomarkers predicting disease course and ensuring a safe treatment tapering during quiescence. Given the detrimental effects of persistent disease activity and protracted corticosteroid therapy on patients’ outcome in lupus, disease remission should be pursued whenever possible. Fortunately, clinical remission is currently realistic for a greater number of patients than it was in the past, yet tight monitoring is required in order for patients to benefit from disease- and corticosteroid-free intervals, while minimizing the risk of disease flares. In everyday practice, patients should be brought to the lowest level of disease activity ensuring a significant benefit over a persistently active disease, being either clinical remission or low disease activity.

Publication type: Journal: Article
Source: EMBASE
Full text: Available Lupus at Lupus

30. Visual manifestations in giant cell arteritis: Trend over 5 decades in a population-based cohort
Citation: Journal of Rheumatology, February 2015, vol./is. 42/2(309-315), 0315-162X;1499-2752 (01 Feb 2015)
Author(s): Singh A.G., Kermani T.A., Crowson C.S., Weyand C.M., Matteson E.L., Warrington K.J.
Language: English
Abstract: Objective. To evaluate clinical characteristics, treatment, and outcomes of patients with visual changes from giant cell arteritis (GCA) and to examine trends over the last 5 decades. Methods. We reviewed the medical records of a population-based cohort of patients with GCA diagnosed between 1950 and 2004. The clinical, ophthalmological, and laboratory features of patients with visual manifestations attributable to GCA were compared to patients without visual complications. Trends over time were examined using logistic regression modeling adjusted for age and sex. Results. In a cohort of 204 cases of GCA (mean age 76.0 +/- 8.2 yrs, 80% female), visual changes from GCA were observed in 47 patients (23%), and 4.4% suffered complete vision loss. A higher proportion of patients with visual manifestations reported jaw claudication than did patients without visual changes (55% vs 38%, p = 0.04). Over a period of 55 years, we observed a significant decline in the incidence of visual symptoms due to GCA. There was a lower incidence of ischemic optic neuropathy in the 1980-2004 cohort vs 1950-1979 (6% vs 15%, p = 0.03). Patients diagnosed in later decades were more likely to recover from visual symptoms (HR 1.34, 95% CI 1.06-1.71). Chances of recovery were poor in patients with anterior ischemic optic neuropathy or complete vision loss. Conclusion. Incidence of visual symptoms has declined over the past 5 decades, and chances of recovery from visual symptoms have improved. However, complete loss of vision is essentially irreversible. Jaw claudication is associated with higher likelihood of development of visual symptoms.

Publication type: Journal: Article
Source: EMBASE
31. Vitamin D antibodies in systemic sclerosis patients: Findings and clinical correlations
Citation: Israel Medical Association Journal, February 2015, vol./is. 17/2(80-84), 1565-1088 (01 Feb 2015)
Author(s): Carmel N.N., Rotman-Pikielny P., Lavrov A., Levy Y.
Language: English
Abstract: Background: Vitamin D is a pivotal factor in calcium homeostasis and exerts immunomodulatory effects. Hypovitamin D has been demonstrated in systemic sclerosis (SSc) patients and may be related to more severe disease of longer duration and with extensive skin involvement. Objectives: To seek anti-vitamin D antibodies in SSc patients, as found by previous research in patients with systemic lupus erythematosus (SLE). Methods: The study included 54 SSc patients and 41 volunteers. Immunoglobulin (Ig) G and IgM autoantibody levels against 25(OH)D and 1,25(OH)D were obtained from patients and controls and were compared. SSc patients were assessed for autoantibody profile and disease severity. Results: Vitamin D antibodies were present in 87% of SSc patients and 42% of controls. Higher levels of anti-25(OH)D IgM antibodies were detected in SSc patients compared to controls (0.48 +/- 0.22 vs. 0.29 +/- 0.29, respectively, P = 0.002); however, IgG levels were lower in the SSc patients. No such discriminative effect was found regarding anti-1,25(OH)D antibodies between SSc and controls. No correlation was found between vitamin D antibodies and other autoantibodies, disease severity, or target organ damage. Conclusions: To the best of our knowledge, this is the first study of these novel anti-vitamin D antibodies in SSc patients and the first time a correlation between IgM 25(OH)D vitamin D antibodies and scleroderma has been identified. Further research on the pathophysiological significance and therapeutic potential of vitamin D is required.
Publication type: Journal: Article
Source: EMBASE

32. Vitamin D status modifies the association between statin use and musculoskeletal pain: A population based study
Citation: Atherosclerosis, January 2015, vol./is. 238/1(77-82), 0021-9150;1879-1484 (January 01, 2015)
Author(s): Morioka T.Y., Lee A.J., Bertisch S., Buettner C.
Language: English
Abstract: Background: Past studies examining the effect of vitamin D on statin myalgia have been variable, however, these studies were done in limited samples not representative of the general population. We aimed to evaluate whether vitamin D status modifies the association between statin use and musculoskeletal pain in a sample representative of the general population. Methods: We conducted a cross-sectional study using the National Health and Nutrition Examination Survey 2001-2004. Musculoskeletal symptoms and statin use were self-reported. Vitamin D status was assessed using serum 25 hydroxyvitamin D (25(OH)D), categorized as <15ng/mL or >15ng/mL. To evaluate if vitamin D status modifies the association between statin use and prevalent musculoskeletal pain, we performed multivariable-adjusted logistic regression models stratified by 25(OH)D status. Results: Among 5907 participants >40 years old, mean serum 25(OH)D was 23.6ng/mL (95% CI, 22.9-24.3). In stratified multivariable-adjusted logistic regression models, individuals with 25(OH)D <15ng/mL, using a statin had a significantly higher odds of musculoskeletal pain compared to those not using a statin (adjusted odds ratio [aOR], 1.90; 95% CI, 1.18-3.05). Among those with 25(OH)D >15ng/mL, we found no significant association between statin use and musculoskeletal pain (aOR, 0.91; 95% CI, 0.71-1.16). Conclusion: Among adults > 40 years old with 25(OH)D <15ng/mL, statin users had nearly 2 times greater odds of reporting musculoskeletal pain compared to non-statin users. Our findings support the hypothesis that vitamin D deficiency modifies the risk of musculoskeletal symptoms experienced with statin use.
Publication type: Journal: Article
Source: EMBASE
Full text: Available Atherosclerosis at No link? Ask Salisbury Healthcare Library - please click here to request article.

33. Walking exercise for chronic musculoskeletal pain: Systematic review and meta-analysis
Citation: Archives of Physical Medicine and Rehabilitation, April 2015, vol./is. 96/4(724-734.E3), 0003-9993;1532-821X (01 Apr 2015)
Author(s): O'Connor S.R., Tully M.A., Ryan B., Bleakley C.M., Baxter G.D., Bradley J.M., McDonough S.M.
Language: English
Abstract: Objective To systematically review the evidence examining effects of walking interventions on pain and self-reported function in individuals with chronic musculoskeletal pain. Data Sources Six electronic databases
MEDLINE, CINAHL, PsychINFO, PEDro, Sport Discus, and the Cochrane Central Register of Controlled Trials) were searched from January 1980 to March 2014. Study Selection Randomized and quasi-randomized controlled trials in adults with chronic low back pain, osteoarthritis, or fibromyalgia comparing walking interventions to a nonexercise or nonwalking exercise control group. Data Extraction Data were independently extracted using a standardized form. Methodological quality was assessed using the U.S. Preventive Services Task Force system. Data Synthesis Twenty-six studies (2384 participants) were included, and suitable data from 17 studies were pooled for meta-analysis, with a random effects model used to calculate between-group mean differences and 95% confidence intervals (CIs). Data were analyzed according to the duration of follow-up (short-term, <8wk postrandomization; medium-term, >2mo to 12mo; long-term, >12mo). Interventions were associated with small to moderate improvements in pain at short-term (mean difference, -5.31; 95% CI, -8.06 to -2.56) and medium-term (mean difference, -7.92; 95% CI, -12.37 to -3.48) follow-up. Improvements in function were observed at short-term (mean difference, -6.47; 95% CI, -12.00 to -0.95), medium-term (mean difference, -9.31; 95% CI, -14.00 to -4.61), and long-term (mean difference, -5.22; 95% CI, -7.21 to -3.23) follow-up. Conclusions Evidence of fair methodological quality suggests that walking is associated with significant improvements in outcome compared with control interventions but longer-term effectiveness is uncertain. With the use of the U.S. Preventive Services Task Force system, walking can be recommended as an effective form of exercise or activity for individuals with chronic musculoskeletal pain but should be supplemented with strategies aimed at maintaining participation. Further work is required for examining effects on important health-related outcomes in this population in robustly designed studies.

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Manson JJ, Chambers SA, Isenberg DA, Merrill JT, and Shipley ME
CRC Press, Taylor & Francis Group, 2014
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Barcode: T026903
Shelfmark: tbc

Rheumatology – evidence based practice for physiotherapists and occupational therapists
Dziedzic and Hammond
Churchill Livingstone Elsevier, 2010
ISBN: 978 0 443 06934 5
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