SATURDAY, 15 JUNE 2019

12:00:00 – 13:30:00

Novel treatments and old challenges: where do we stand in the management of antiphospholipid syndrome

SP0200

TARGETED TREATMENTS: WHAT'S ON THE HORIZON FOR OBSTETRIC ANTIPHOSPHOLIPID SYNDROME?

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Pregnancy in women with APS and/or lupus is dangerous both for mother and offspring, and, in the past, patients were advised not to have children. Among complications frequently seen in women with lupus are preeclampsia (also known as toxemia of pregnancy), preterm birth, markedly underweight newborns, and fetal death. Identifying women destined for complications remains challenging and limits our ability to counsel and care for pregnant lupus patients.

There is currently no effective treatment for women with these high-risk pregnancies; treatments to prevent poor pregnancy outcomes require an understanding of mechanisms of injury. Our research in an animal model that mimics the human condition shows that blockade of well-established mediators of inflammation, specifically complement and TNF-alpha, prevents adverse outcomes. To translate these discoveries to lupus patients, we launched the **PROMISSE** Study (Predictors of pRegnancy Outcome: bioMarkers In antiphospholipid antibody Syndrome and Systemic lupus Erythematosus) to determine which pregnancies were at highest risk for adverse outcomes. Over 20% of pregnancies in patients with SLE resulted in an adverse pregnancy outcome. We discovered that the presence of a lupus anticoagulant which can be detected in the blood before pregnancy or in the first trimester, confers a 10-fold increase in risk of complications. Furthermore, we found that early in pregnancy, measurable alterations in the balance of angiogenic factors (proteins that circulate in blood, promote proper placenta development, and are required to maintain the health of the mother's vascular system) are highly predictive of preeclampsia and other pregnancy complications.

The results of the PROMISSE Study provide models for early risk stratification to allow physicians to identify patients early in pregnancy who are at low risk and reassure them that their pregnancies were likely to be uncomplicated and their babies healthy. Conversely and importantly, we can reliably predict which patients are destined to have poor pregnancy outcomes, and we conducting a trial with a TNF-alpha inhibitor that does not cross the placenta in patients at highest risk an experimental therapy to prevent placental dysfunction. Treatments to prevent poor pregnancy outcomes require an understanding of mechanisms of injury. Experiments in mouse models have enabled us to embark upon a trial of a potential treatment.

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SP0201

CATASTROPHIC APS TREATMENT GUIDELINES

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The current recommendation for specific therapy of catastrophic antiphospholipid syndrome (CAPS) is the triple therapy with anticoagulation, glucocorticoids, plasma exchange and/or intravenous immunoglobulins. Of note, only anticoagulation had a significant effect improving the vital prognosis of these patients. From the experimental point of view, there is only indirect evidence to advocate the use of these immunomodulatory therapies in CAPS.

Recently, two monoclonal antibodies, rituximab and eculizumab, have been successfully used in some cases of severe or refractory CAPS. The first decreases the generation of pathogenic autoantibodies such as antiphospholipid. The second prevents the generation of C5b-C9 complex.

The current presentation will describe the conventional and recent modalities of CAPS treatment, discussing the rationale for each one.

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How low should you go? What is the relevant target in T2T in rheumatoid arthritis?

SP0202

WHAT DOES REMISSION MEAN FOR PHYSICIANS?

Laure Gossec. Sorbonne Université and Pitié-Salpêtrière Hospital, Rheumatology, Paris, France

Remission is the announced objective in rheumatoid arthritis. However, there are several definitions of remission. In this talk, we will review different health professional based definitions of remission, the components of these definitions, and their advantages and drawbacks.

Disclosure of Interests: Laure Gossec Grant/research support from: AbbVie, BMS, Celgene, Janssen, Lilly, MSD, Novartis-Sandoz, Pfizer, Sanofi, and UCB, Consultant for: AbbVie, Biogen, BMS, Celgene, Janssen, Lilly, MSD, Nordic Pharma, Novartis-Sandoz, Pfizer, Roche, Sanofi, and UCB, Consultant for: L Gossec has received honoraria from Celgene as investigator for this study

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SP0203

WHAT DOES REMISSION MEAN FOR PATIENTS?

Ruth Williams. Kings College London, Department of Inflammation Biology, London, United Kingdom

What does remission in Rheumatoid arthritis mean to patient?

This session discusses what remission means to patients. Remission holds different meaning for researchers, clinicians and patients. In addition it holds different meaning for individual patients and for individual patients at different points of time in their lives. I shall reflect on over fifty years living with Rheumatoid arthritis, as both a patient and a doctor. To consider the changes in my care, my therapy and in my own and my clinicians objectives and treatment aims, at different points in time. Looking at how things have progressed from pain relief, splinting, physical therapy, rehabilitation and surgery. To progressively more effective DMARD's, anti-TNF's & Biologics and an aim of complete 'clinical remission'.

However commonly 'clinical remission' can conflict with a patients concept of remission, as patients are individuals and the tools used to define remission are research based and consider populations not people. 'Disease activity scoring' and 'Treat to Target' has had significant impact on patients, clinicians and their rheumatology consultations. The absence of inflammation does not equal remission for many patients and it is important to consider the differing needs of patients who were diagnosed pre and post- biologic therapies and those with refractory disease. Currently maximal energy appears to be concentrated on the newly diagnosed and even pre-diagnosis, but has this been at the detriment of those with long established disease?

I will share my own and different patients viewpoints of what 'remission' means and consider the benefits of progress in effective 'therapies' but also to reflect upon some of the important things that may have been lost from clinical 'care' along the way. To list simple things that can help patients achieve remission that can easily be forgotten. I will explain the phenomenon of 'DAS blindness' and the potential failings it can lead to. Discuss how improved shared decision making of treatment aims might improve outcomes for patients whilst reducing risk and possibly costs; aiming to increase patient autonomy and improve the doctor patient dynamic.

In order to achieve 'remission' for patients we need to have a clear shared understanding of what 'remission' means to each individual and only then can we aim to achieve it.

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SATURDAY, 15 JUNE 2019

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Behaviour change in fibromyalgia

SP0204

CASE1 PRESENTATION: FACILITATING BEHAVIOUR CHANGE IN FIBROMYALGIA: A CASE STUDY FROM THE UK

Yeliz Prior. University of Salford, Centre for Health Sciences Research, Manchester, United Kingdom

Background: Fibromyalgia is a chronic pain condition which, is commonly accompanied by the symptoms of fatigue, sleep disturbance, low mood and cognitive dysfunction. EULAR Revised Recommendations for the management of Fibromyalgia suggests initial management should involve patient education and focus on non-pharmacological therapies [1]. Occupational Therapists at the Rheumatology Outpatients Department, Leighton Hospital, Mid Cheshire NHS Hospitals Foundation Trust developed the Fibromyalgia Self-Management Education (FAME) Group Programme, based on the current evidence-base and patient partner involvement. The primary aim of this programme is to support self-management of Fibromyalgia using behaviour change interventions as outlined in the NICE recommendations. FAME comprises 2.5 hrs weekly sessions over six weeks (6-Wks) and core components include education about Fibromyalgia, pain, fatigue, sleep and mood management, dealing with dysfunction, physical exercise and practicing mindfulness, based on Cognitive Behavioural Therapy (CBT) and Motivational Interview (MI) approaches.

Objectives: Service evaluation aims to assess how well a service is achieving its objectives. This service evaluation was undertaken with a view to benefit patients using the FAME Group Programme and is designed and conducted with the sole purpose of defining and examining the current occupational therapy service provision for people with Fibromyalgia at the Mid Cheshire NHS Trust Hospitals. This Case Study will report on the findings of this service evaluation with reference to patient outcomes and discuss the barriers and facilitators of implementing this programme at an NHS Hospital setting.

Methods: Patients with a primary diagnosis of FM were screened and recruited from the rheumatology department of the Mid-Cheshire NHS Hospitals. Patients self-completed postal questionnaires at home [including socio-demographic characteristics; General Health Questionnaire SF-12; Revised Fibromyalgia Impact Questionnaire; Arthritis Self Efficacy Scale; Multidimensional Assessment of Fatigue Scale] at baseline, and again at 6 and 12-week follow-up. Focus groups were held at the hospital following the completion of the FAME Group Programme, to obtain patients' views on the programme content, delivery and the impact on their self-management. Quantitative data from the baseline, 6 and 12-week follow-up questionnaires were analysed using paired t-tests and effect sizes calculated using eta-squared. Focus groups were transcribed and analysed by three independent researchers, not involved in the initial design or the delivery of this programme, using Thematic Analysis [2].

Results: As the service evaluation is in progress at the time of submitting this abstract, the results will be presented and discussed at the annual meeting.

Conclusion: To be discussed at the meeting.

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How to build a clinical scientist

SP0205

SCIENCE CARRIER AND MENTAL HEALTH

Annet van Royen. **Background:** Clinician scientists are at the heart of the translational medicine process. Over the last decades many reports and studies have showed that they risk becoming extinct, and that efficient career pathways are

lacking. Recently more reports show that alarming numbers of clinicians and clinical scientists suffer from burn out and depression.

To address this issue, next to thorough study of the root factors leading to mental problems it is important to develop career pathways for clinician scientists and educational programs to improve resilience.

New educational programs such as those offered by the Eureka Institute help to build networks of translational scientists and help to strengthen resilience, needs to overcome the challenges they face while pursuing translational research.

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SATURDAY, 15 JUNE 2019

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Restless lives: managing fatigue, sleep and pain

SP0206

LINKS BETWEEN SLEEP QUALITY AND IMMUNITY IN RMDs

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Summary: Sleep and the immune system are bi-directionally linked. An immune activation induces fatigue, sleepiness and changes in sleep architecture. These range from a deepening of sleep to severe sleep disturbances with shallow and fragmented sleep. Patients with rheumatic and musculoskeletal diseases (RMDs) often complain about feelings of debilitating fatigue, of problems initiating and maintaining sleep and of unrefreshing sleep. Chronic low-grade inflammation due to the RMD, disease symptoms such as pain, concurrent diseases such as depression and medication such as glucocorticoids are potential triggers of poor sleep. Often it is demanding to delineate the exact cause(s) of sleep impairments in patients with RMDs and attempts to improve sleep quality therefore often fail. However, as fatigue and sleep problems can substantially impair quality of life and as poor sleep may further aggravate RMDs and their symptoms it is key to unravel the pathophysiology of fatigue and poor sleep in these patients. A deeper understanding of sleep-immune interactions in RMDs will advance targeted interventions that presumably will encompass a combination of immunomodulatory drugs, chronopharmacology and cognitive behavioral therapy.

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- [3] Lacourt TE, Vichaya EG, Chiu GS, Dantzer R, Heijnen CJ. The high costs of low-grade inflammation: persistent fatigue as a consequence of reduced cellular-energy availability and non-adaptive energy expenditure (2018) *Front Behav Neurosci* 12:78.

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SP0207

PHYSICAL ACTIVITY, CHRONIC MUSCULOSKELETAL PAIN AND INSOMNIA

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The interplay between physical activity, chronic musculoskeletal pain and insomnia

The unfavourable consequences of insomnia and musculoskeletal pain for both individuals and society underscore the importance of identifying modifiable factors for prevention and treatment. Prospective studies have shown that there exists a bidirectional relation between insomnia and musculoskeletal pain, i.e., insomnia is associated with risk of chronic musculoskeletal pain and vice versa. This suggests that management of insomnia symptoms may be an efficient treatment objective for people with musculoskeletal pain and that management of musculoskeletal pain has the potential to improve sleep quality. Furthermore, some evidence shows that physical activity may represent an efficient initiative that can improve both sleep quality and chronic pain, potentially leading to effects as beneficial as pharmacological treatment. However, many unresolved questions need to be resolved before physical activity can be prescribed as an optimal treatment