J R Coll Physicians Edinb 2012; 42:350–1
http://dx.doi.org/10.4997/JRCPE.2012.414

Rheumatology Symposium

The Rheumatology Symposium was held on 19 September 2012 at the Royal College of Physicians of Edinburgh

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DECLARATION OF INTERESTS No conflict of interests declared.

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EDUCATION

In the past decade, the outlook for patients with rheumatoid arthritis has improved as a result of better understanding of the pathogenesis of the disease and the availability of more sensitive diagnostic tools like musculoskeletal ultrasound. This symposium focused on the prospects of individualised therapy, diagnostics and novel treatments such as stem cell transplantation.

SESSION 1 – PERSONALISED MEDICINE IN RHEUMATOID ARTHRITIS

Professor Peter Taylor (Norman Collisson Professor of Musculoskeletal Sciences, Kennedy Institute of Rheumatology, University of Oxford) emphasised the heterogeneity of rheumatoid arthritis in its presentation, response and tissue damage. He highlighted the psychological aspects of patient management and spoke about a move from phenotype to 'pathotype' allowing for treatment tailored to each patient. He concluded that this may be possible in future with the advances being made in genome-wide association studies and identification of multiple biomarkers of the disease.

Dr Michael Townsend (Scientist, Tissue Growth and Repair Biomarker Discovery, Genentech) stated that, using gene expression and histologic and cellular analysis of synovial tissue, his team has identified the presence of three distinct subsets of synovium – lymphoid, myeloid and fibroid, with lymphoid being more responsive to rituximab and myeloid more responsive to anti-tumour necrosis factors (anti-TNFs). Translating synovium subsets and specific gene expression to identifiable serum biomarkers would allow for targeted therapy.[1] Dr Townsend demonstrated that increased serum levels of CXCL13 and sFcRH5, related to the lymphoid subset of rheumatoid synovium, responded to B-cell depletion.

SESSION 2 – INNOVATION IN RHEUMATIC DISEASES

Dr Liz Lightstone (Renal Clinical Academic Lead for Training and Reader and Honorary Consultant Physician, Imperial College London) described recent research by her unit on managing lupus nephritis (LN). Applying their experience of managing renal transplant patients without the use of steroids, they developed the Imperial College Lupus Centre RITUXILUP regimen for lupus nephritis – induction being achieved using rituximab + methyl prednisolone followed by mycophenolate mofetil (MMF). Overall complete remission (CR) was achieved in 36/50 patients (72%) and partial remission in a further 18%. Median time to CR was 36 weeks irrespective of the class of LN. A multicentre trial to compare the RITUXILUP regimen with the standard MMF + steroids regimen is being organised. Dr Lightstone also highlighted the possibility of assessing compliance by measuring hydroxychloroquine levels in lupus patients. She concluded her talk with management of lupus nephritis in pregnancy using drugs such as azathioprine, tacrolimus, hydroxychloroquine and intravenous methylprednisolone, completely avoiding the use of oral steroids.

STANLEY DAVIDSON LECTURE

Systemic sclerosis remains a debilitating disease even in the absence of multiple organ involvement, given the effect of fibrosis on quality of life. Early diagnosis of the condition and autologous stem cell transplants offer some hope.[2] Professor Alan Tyndall (Professor and Head, Department of Rheumatology, University of Basel) demonstrated the improvement in event-free survival in patients who underwent autologous stem cell transplantation (ASTIS trial). The lecture ended on a note of hope of greater public awareness and the possibility of improved outcome with fewer treatment-related mortalities.

SESSION 3

For the first time, breakout workshops were included in the symposium. In her lecture on predictive value of ultrasound in inflammatory arthritis, Dr Jane Freeston (Clinician Scientist and Honorary Consultant Rheumatologist, University of Leeds and Leeds Teaching Hospitals NHS Trust) gave compelling evidence of the merits of

incorporating musculoskeletal ultrasound into routine clinical practice to not just detect sub-clinical synovitis but also to predict the likelihood of disease progression based on the presence of power Doppler signals.[3] Workshops included an interactive session on managing young adults' transition in rheumatology, clinical assessment and management of foot and ankle in rheumatic disease with a masterclass on foot and ankle ultrasound.

SESSION 4

The focus of this session was to look at the day-to-day management of three particular inflammatory disorders. Professor John Kirwan (Professor of Rheumatic Diseases and Consultant Rheumatologist, University Hospitals Bristol NHS Foundation Trust) outlined the management of polymyalgia rheumatica (PMR) and giant cell arteritis (GCA). In his practice, he has found lower relapse rates with slower steroid reduction over 24 months for PMR. Dr Hilary Wilson (Consultant Rheumatologist, Glasgow Royal Infirmary) gave an update on the management of psoriatic arthritis[4] and the newer biologics (ustekinumab) available for use in these patients. She outlined the evidence for the use of methotrexate (as the first-line disease-modifying anti-rheumatic drug [DMARD]) and leflunomide. Dr Philip Riches (Consultant Rheumatologist and Honorary Senior Lecturer, Western General Hospital, Edinburgh) outlined the need to manage gout effectively by lowering and maintaining serum urate levels below 0.36 mmol/L. This could be achieved by appropriate dosage of serum urate lowering drugs like allopurinol and febuxostat.

SUMMARY

These are exciting times in the field of immunology and inflammatory disorders. Although 'cure' in itself is not yet possible, targeted treatments are likely to achieve good outcomes for our patients earlier and improve treatment-related risks.

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EDUCATION