Midland Rheumatology Society
Annual General Meeting

Friday 7th November 2014

The Ruskin Centre
Glasshouse Trading, Wollaston Road, Amblecote
Stourbridge, West Midlands, DY8 4HF
ruskinglasscentre.co.uk

Programme

09.00  Registration and Coffee

09.20  Welcome and Introduction

09.30  Microbiology for Rheumatologists
Speaker: Ed Moran, Consultant in Infectious Disease & Acute General Medicine, Heart of England

10.20  Clinical Papers

1. Potential new KPIs in Rheumatology
   Sabrina R Kapoor, Tanya Potter

2. ACE in the pack or unreliable joker: utility of angiotensin converting enzyme testing in a rheumatology clinic - A service evaluation
   Siobhan Orr, Paresh Jobanputra

3. Sustained clinical response to anti-TNF therapy in ankylosing spondylitis with up to 10 years of follow-up data
   Joshua Ward, Sayqa Butt, Chris Deighton

4. Allopurinol use and the illness perceptions of gout patients in primary care
   Ciaran P. Walsh, James A. Prior, Priyanka Chandratre, Christian D. Mallen & Edward Roddy

11.20  Coffee and Poster Viewing

11.45  Clinical Cases from Local Team

12.45  BSR / BHPR Update
Simon Bowman & Regional Chairs

13.15  Lunch
14.10  **Disease Activity Measurements, Past Present and the Future**  
Speaker: Prof van Riel, Consultant Rheumatologist, Radboud University Medical Centre, Nijmegen, Netherlands

15.00  **Clinical Papers**

5.  **Audit of the Dudley Early Rheumatoid Arthritis Clinic in Accordance with the NICE Quality Standards (QS33)**  
Nicola Dolan, Elizabeth Wells, Ravinder Sandhu

6.  **Cross sectional study of physical activity levels in women with Rheumatoid Arthritis with low disease activity on anti-TNF therapy compared to healthy non-RA female controls**  
Tharaq Barami, Alison Booth, Gregory Summers, Katherine Brooke-Wavell, Stacy Clemes

7.  **Management of the acute swollen joint at Russell’s Hall hospital—an audit of medical inpatients**  
Nehal Narayan

8.  **Patient attitudes to new national on-line paediatric rheumatology transition documentation**  
Katie Patterson, Cath Thwaites, Alex Tabor, Jon Packham

16.00  **Coffee and Poster Viewing**

16.30  **Cardiovascular Disease in RA: Problems, Ideas and Solutions**  
Speaker: Professor George Kitas, Director of Research & Development The Dudley Group NHS Foundation Trust

17.20  **MRS AGM**

18.00  **The Glass Museum Tour and hands on followed by Dinner**

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**Approved for 6 RCP CPD Points: Code 89132**

This meeting has been supported by the pharmaceutical industry by purchasing exhibition stand space of which the contributions have been provided equally by Abbvie Ltd, Bristol-Myers Squibb Pharmaceuticals Ltd, UCB Pharma Ltd, Chugai UK/Roche, Merck Sharp & Dohme Ltd, Medac GmbH Uk branch, Pfizer Ltd.
Clinical Papers
POTENTIAL NEW KPIs IN RHEUMATOLOGY

Authors: Sabrina R Kapoor, Tanya Potter
Address: University of Hospital and Coventry and Warwickshire

Background
The only existing KPI in musculoskeletal disease are for hip fracture and recovery from fragility fracture. BSR would welcome the introduction of further MSK indicators that address the lack of commissioner incentives to deliver quality care for the significant proportion of the population suffering from preventable and manageable rheumatic conditions. BSR suggest that another indicator worthy of NICE consideration for RA or all inflammatory disease would be the percentage of patients who have had an annual review which, as well as a Disease Activity Score should include cardiovascular and osteoporosis risk assessment (as outlined in existing NICE guidelines).

Methods
Existing NICE guidelines state that people with RA should be offered an annual review to: 1/assess disease activity and damage, and measure functional ability (using, for example, the Health Assessment Questionnaire [HAQ]), 2/check for the development of comorbidities, such as hypertension, ischaemic heart disease, osteoporosis and depression, 3/assess symptoms that suggest complications, such as vasculitis and disease of the cervical spine, lung or eyes, 4/organise appropriate cross referral within the multidisciplinary team, 5/assess the need for referral for surgery and 6/assess the effect the disease is having on a person's life. We assessed current practice at UHCW in line with BSR proposed KPI. We reviewed the clinical letters, blood results and radiology reports over a 14 month period (March 2013 to May 2014) of 10 patients with RA per each of the 8 rheumatology consultants.

Results
Over this 14 month period 81.25% of patients had their disease activity measured by a DAS28, 0% had a HAQ score and 73.8% had their damage assessed. 52.5% of patients were checked for hypertension, 65% of patients had a lipid profile, 35% were assessed for osteoporosis and 5% assessed for depression. We assesses symptoms of vasculitis in 46.2% of patients and 91.25% of patients were referred to other members of the MDT. Quality of life was assessed in 55% of patients.

Conclusions
UHCW do not run a specific annual review clinic and this may be why some of these areas are not addressed fully. The clinic notes of these patients were not reviewed but if this is enforced as a new KPI then all information needs to be in the clinical letter as this is the only information the GP receives. As beneficial as KPIs are there is some overlap with this proposed BSR KPI and the GP QOF which also covers depression screening, assessment of bone health and cardiovascular risk.
ACE IN THE PACK OR UNREliable JOKER: UTILITY OF ANGIOTENSIN CONVERTING ENZYME TESTING IN A RHEUMATOLOGY CLINIC – A SERVICE EVALUATION.
Siobhan Orr¹, Medical Student, University of Birmingham.
Paresh Jobanputra², Consultant Rheumatologist, Queen Elizabeth Hospital Birmingham B15 2TH.

ABSTRACT

Background: An increase in serum angiotensin converting enzyme (ACE) is seen in about 60% of patients with sarcoidosis. However, British Thoracic Society (BTS) guidelines do not recommend its use in diagnosis due to its poor sensitivity and specificity. In addition enzyme levels show considerable inter-individual differences due to genetic polymorphisms. Our experience suggests that despite BTS recommendations testing ACE is widespread in clinical practice.

Aims: Our overarching aim was to examine the utility of ACE measurement in a population of patients seen in a rheumatology clinic. Specifically we wanted to: identify the usefulness of measuring serum ACE level for the diagnosis of sarcoidosis in patients with rheumatic symptoms; whether ACE tests were useful when tested repeatedly in patient follow up and the degree of variation in testing between different rheumatology consultants.

Methods: Consecutive ACE test requests over 18 months were identified from records kept in the Department of Biochemistry at Queen Elizabeth Hospital Birmingham. Tests requested from rheumatology clinics were identified and key data extracted. Patients were included if an ACE test was requested in the rheumatology outpatient department. Patients were excluded if the ACE test result was not available due to sampling or processing errors or if there was evidence of testing ACE prior to the visit to rheumatology. Patients with a previous diagnosis of sarcoid/presumed sarcoid were analysed separately.

Results: A total of 1864 requests were made over 18 month period, 115 (6.2%) of which were from the rheumatology department. 94/1864 (5%) of these were valid for inclusion. The clinical features of patients tested were: widespread rheumatic symptoms (48%); oligo- or mono-articular joint disease (13%); known non-sarcoid rheumatic disease (13%); radiological abnormality (4%); unclassified or unknown reasons (22%). A raised serum ACE was found in 23/94 (24.5%) but only 2 were diagnosed with sarcoidosis. The prevalence of sarcoid was 2.1% (CI 0.3% to 7.5%). Although sensitivity of ACE testing appears high at 100% (CI 19.3% to 100%; specificity 75% (CI 67 to 85%) this was based on only 2 patients, therefore this data has limited utility. More importantly the positive predictive value (PPV) of a raised ACE level, that is the proportion of positive test results that were true positives, was only 8.7% (CI 1.3 to 28.1%). A review of electronic records of all patients with confirmed clinical sarcoidosis who had ACE testing, showed that testing was done irregularly and there was no indication that results changed patient care. There was variation in the number of tests requested by individual consultant rheumatologists (a total of 7 consultants) ranging from 2.0 per1000 consultations to 57.8 per 1000.

Conclusions: There needs to be more awareness of the limited utility of ACE measurement in clinical practice and the recommendations made by the BTS regarding testing. It is possible that a normal level could help rule out sarcoidosis but our data are insufficient to be certain and it should be appreciated that there are considerable inter-individual differences in ACE levels determined by genotype.
SUSTAINED CLINICAL RESPONSE TO ANTI-TNF THERAPY IN ANKYLOSING SPONDYLITIS WITH UP TO 10 YEARS OF FOLLOW-UP DATA
Joshua Ward, Sayqa Butt, Chris Deighton
Department of Rheumatology, Royal Derby Hospital

Introduction: Anti-TNF agents are increasingly being used in the treatment of patients with ankylosing spondylitis (AS) who are refractory to NSAIDs. There is much existing data to suggest that these drugs reduce symptom severity and slow disease progression, however the duration of follow-up in such studies is typically short. The present study aims to show responses in clinical practice associated with long-term anti-TNF therapy at durations of up to 10 years of follow-up.

Methods: Data that is routinely collected in clinical practice was analysed for 117 AS patients on anti-TNF therapy, collected between 2003 and 2014. Patients were receiving either adalimumab (n=24), infliximab (n=11) or etanercept (n=82). Patients were followed up at 3-monthly intervals and disease activity assessed using the BASDAI score, a patient-reported metric of symptom severity. Statistical analysis was performed to assess the reduction in BASDAI from baseline at 3 months follow-up and 3-monthly thereafter, up to a maximum of 120 months. Separate analysis was also performed to determine whether duration of disease prior to initiation of anti-TNF therapy influenced response to treatment. Finally, qualitative data was analysed to assess the relative frequency of reasons for discontinuation of treatment.

Results: Mean BASDAI reduction from baseline across all drugs was 4.6 (95% CI: 3.9-5.4, p<0.0001). A similar reduction was seen irrespective of specific anti-TNF agent chosen. BASDAI remained significantly below baseline for the duration of follow-up. Duration of disease prior to treatment was not a significant predictor of BASDAI reduction at 3 months follow-up. 30 patients discontinued treatment (25.6%), of which 8 were due to side-effects.

Conclusion: This study suggests that anti-TNF therapy is highly effective in reducing patient-reported symptom severity in AS, irrespective of duration of disease prior to initiating treatment. This beneficial effect appears to persist for the duration of follow-up for 74.4% of patients. Discontinuation rates and incidence of severe side-effects are low. This study therefore supports the sustained benefit of anti-TNF therapy in NSAID-refractory AS in clinical practice.
ALLOPURINOL USE AND THE ILLNESS PERCEPTIONS OF GOUT PATIENTS IN PRIMARY CARE

Ciaran P. Walsh, James A. Prior, Priyanka Chandratre, Christian D. Mallen & Edward Roddy

Background

Gout is the most prevalent form of inflammatory arthritis, affecting 2.49% of UK adults. Gout is primarily managed in primary care and long-term treatment to lower serum uric acid levels is commonly achieved through the use of allopurinol. Individuals with chronic illnesses, such as gout, often conceptualise thoughts and emotions of their condition and related treatments into illness perceptions. Patients with negative illness perceptions have been shown to have poorer long-term health outcomes, but such perceptions of gout patients, particularly those using allopurinol, remain unclear. Our study examined the association between the use of allopurinol and the illness perceptions of gout patients from UK primary care.

Methods

As part of a longitudinal cohort study, a questionnaire was sent to 1,805 adults with a primary care diagnosis of gout, two years prior to the questionnaire. This survey included several questions from the brief-illness perception questionnaire, asking patients whether there is i) a lot I can do to control my gout, ii) what I do will affect my gout, iii) treatments are effective and iv) gout is serious. Responder characteristics were described and logistic regression analysis used to establish any association between the use of allopurinol and illness perceptions. Results were recorded as Odds Ratios (95% confidence interval) and adjusted for: age, gender, deprivation, BMI, comorbidity, alcohol intake and gout-specific characteristics.

Results

1,184 participants responded to the questionnaire (65.6%). Adjusted analysis showed no association between the use of allopurinol and the perception of gout patients that there is ‘a lot I can do to control my gout’ or ‘what I do will affect my gout’. However, gout patients using allopurinol were twice as likely to be uncertain (1.93 (1.2 to 3.0)) or disagree (2.65 (1.4 to 5.1)) than agree that ‘treatments are effective’ compared to those not using allopurinol. Finally, gout patients using allopurinol were 50% more likely to be uncertain (1.55 (1.0 to 2.3)) than agree that ‘gout is serious’ compared to those not using allopurinol.

Conclusions

The use of allopurinol in UK primary care gout patients was associated with negative or indifferent perceptions. As allopurinol is an effective urate-lowering therapy when used correctly, patients and general practitioners may benefit from better education about the nature of gout, and the positive and negative effects associated with allopurinol.
AUDIT OF THE DUDLEY EARLY RHEUMATOID ARTHRITIS CLINIC IN ACCORDANCE WITH THE NICE QUALITY STANDARDS (QS33)
Nicola Dolan, Elizabeth Wells, Ravinder Sandhu
Dudley Group NHS Foundation Trust

Introduction: Joint damage and loss of function occur early in rheumatoid arthritis (RA). Delay in treatment leads to poorer outcomes. Combination treatments with disease modifying anti-rheumatic drugs (DMARDs) results in higher rates of disease remission. This approach, coupled with tightly-controlled monitoring of disease activity (DAS28) and regular adjustment of treatment, leads to improved outcomes. Designated Early Inflammatory Arthritis Clinics (EIACs) are one way in which patients with suspected RA can be appropriately investigated, diagnosed, treated and reviewed. The aim of this audit is to evaluate the referral timeline and management of patients with new onset RA within the Dudley Early Arthritis Clinic in accordance with the NICE Quality Standards QS33.

Methods: In this prospective audit, data was obtained from the notes of consecutive patients attending a weekly EIAC at Russells Hall Hospital in Dudley. To audit statements 2, 3, 4 and 5 of the NICE Quality Standards, an electronic proforma was devised to obtain the following data:- Timeline from GP referral to being reviewed by the Rheumatology team; Diagnosis; Anti-CCP and Rheumatoid Factor (RF) status; If, when and which glucocorticoids patients were offered; If, when and which DMARDs patients were offered; Any educational/ self-management information provided; Points of contact; The Disease Activity Score (DAS28) at baseline and at months 1, 2 and 3 (± 2weeks).

Results: Data for 48 consecutive patients was obtained. 35 had definite RA (according to 2010 or 1987 classification criteria) and 3 were diagnosed with probable RA. 8 patients had undifferentiated inflammatory arthritis; 1 had another suspected diagnosis and 1 had no diagnosis recorded. 65% patients were anti-CCP positive and 58% were RF positive. Anti-CCP/ RF status was unknown in a further 4%. 23% are seen within 3 weeks of referral. The majority of patients (58%) are seen between 6 and 12 weeks.

89.5% patients were offered Short Term glucocorticoids. The most common route was IM injection. Of those offered Short Term glucocorticoids 85% of these received them within 3 weeks of their first clinic visit; 3% between 3 and 6 weeks; 6% between 6 and 12 weeks and 6% after 12 weeks. 50% patients received combination DMARDS (all had definite RA). The 19 remaining all received monotherapy. Of those that received combination DMARDS, 32% received combination DMARDs in less than 3 weeks; 16% between 3 and 6 weeks; 26% between 6 and 12 weeks and 26% after 12 weeks. The most commonly used DMARDs were methotrexate and hydroxychloroquine and the only other used was sulfasalazine.

100% of patients with RA or probable RA received educational and self-management activities within 1 month of diagnosis including a comprehensive RA pack, information about DMARDS, a named consultant and nurse and a helpline number.

12 patients or 32% had on schedule DAS28 monitoring (monthly +/- 2 weeks) for the stage of treatment they were at. 26 patients or 68% did not have monthly DAS28 monitoring:- 42% had 3 out of 4 recordings (including baseline), 13% had 2 out of 4; 11% 2 recordings out of 3 and 3% had 1 recording out of 3.

Conclusion: Patients received a treat to target approach in the Early Arthritis Clinic with regular and monitoring of their DAS 28 for the majority of patients having 3-4 assessments within a 4 month timeframe. All patients were offered educational and self management activities within 1 month of diagnosis. Evidence of declining disease activity within the first 4 months was encouraging. Areas of concern were that the majority of patients (77%) were not seen with 3 weeks of GP referral as per NICE Quality Standards. Patients had symptoms for a mean period of 7.9 months (Median 4 months) prior to seeing rheumatology. We have subsequently developed referral proforma to aid GPs in referral and to identify patients with early inflammatory arthritis. We have also rearranged the Rheumatology New Patient clinic slots to incorporate patients with suspected early inflammatory arthritis to be seen within 3 weeks. The CNS team is utilised to commence DMARDs promptly once a diagnosis is made.
CROSS SECTIONAL STUDY OF PHYSICAL ACTIVITY LEVELS IN WOMEN WITH RHEUMATOID ARTHRITIS WITH LOW DISEASE ACTIVITY ON ANTI-TNF THERAPY COMPARED TO HEALTHY NON-RA FEMALE CONTROLS

Tharaq Barami¹, Alison Booth¹, Gregory Summers¹, Katherine Brooke-Wavell², Stacy Clemes²
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Muscle wasting known as Rheumatoid cachexia is well recognized in patients with rheumatoid arthritis (RA). This has been attributed to lower physical activity levels as well as the effects of the inflammatory process on muscle metabolism. Questionnaire studies have shown that anti-TNF treatment improves physical function and work capability although there is no data on objective physical activity measurements. This ongoing study compares physical activity levels of female RA patients with low disease activity on long term anti-TNF therapy, against patients with active RA not on anti-TNF and non-RA controls. We present interim data from two of the groups - well controlled anti-TNF patients compared to non-RA controls.

RA patients who are well controlled (DAS 28 <3.2) on anti-TNF therapy (≥2 years) were identified from departmental database at Royal Derby Hospital. Healthy controls were recruited through local advertisements. The study was limited to women to maintain consistency and validity. Patients with joint replacements, using mobility aids, or involved with competitive sports were excluded. Participants wore an ActiGraph GT3X+ accelerometer (ActiGraph, Pensacola, FL) throughout waking hours for seven consecutive days, except during water-based activities. This is a small, lightweight tri-axial accelerometer worn on an elasticated belt on the waist, above the mid-line of the right thigh. Accelerometer captures frequency, intensity and duration of physical activity and periods of rest. Data was analyzed for time spent in sedentary behavior, light physical activity (slow walking) and moderate to vigorous physical activity (MVPA) such as jogging or running.

37 female patients on anti-TNF (mean age of 58 ± 11 yrs) were compared with 23 healthy female controls (Mean age: 60 ± 11 yrs). The two groups did not differ significantly in terms of age or accelerometer wear time (p>0.05). There were no significant differences in time spent sedentary (p=0.25) or time in light intensity activity (p=0.29), between the two groups. The healthy controls spent a significantly greater amount of time in MVPA, in absolute minutes (p=0.04) and proportion of wear time (p=0.03), in comparison to the anti-TNF group. Mean daily step counts did not differ significantly between the two groups (p=0.07).

This study indicates that although joint inflammation is well controlled on long term anti-TNF therapy; normal levels of physical activity are not achieved. Exercise therapy has been shown to restore muscle mass in rheumatoid cachexia and should be routinely available to our patients.
Several pieces of published guidance for management of the acute swollen joint exists; including the 2006 BSR recommendations for management of the hot swollen joint, and the 2009 recommendations made by EULAR/EFFORT for management of acute knee swelling. Common to all these recommendations are that affected patients undergo history taking, examination to include the musculoskeletal system, blood tests to include full blood count, inflammatory markers and renal function, plain X rays of the affected joint, and aspiration of the swollen joint.

We would expect management of any acute swollen joint to be in line with these recommendations. The importance of aspiration of the acute swollen joint is further acknowledged by the fact that knee joint aspiration is deemed an ‘essential GIM procedure’ by the JRCPTB (Joint Royal Colleges Postgraduate Training Board), and registrars training in General Internal Medicine are unable to complete training without demonstrating competence in this procedure, nor are Core Medical Trainees able to complete training without demonstrating ability to perform knee aspiration.

Our audit aimed to assess whether management of patients with any acute swollen joint on medical wards adhered to the EULAR/EFFORT recommendations. Further, in cases of acute swollen knee, we noted whether aspiration was performed by the general medical team prior to rheumatology referral, and who in the team undertook this procedure. The case notes of medical inpatients referred to the rheumatology registrar at Russell’s Hall Hospital over a 3 month period with acute onset joint swelling (onset less than 6 weeks) were reviewed.

23 patients meeting the target criteria were identified over 3 months. Ages ranged from 38 to 92 years old. 15 out of 23 had acute knee swelling. Out of 23 patients, 18 had documented history, 2 had documented examination of joints, 16 had blood tests including inflammatory markers. 1 test also included urate, and 1 included ANA and rheumatoid factor. 5 out of 23 patient had X rays of the affected joints. Out of 23 patients, 15 had swollen knees, and 3 of these had knee joint aspiration prior to rheumatology referral. No aspiration of joints other than knees was undertaken prior to rheumatology referral. Of those 3 patients that had knees aspirated, one was done by orthopaedics prior to rheumatology referral. Of the remaining 2 patients that had knee aspiration, 2 of these were done by a renal SHO (core medical trainee). Median Time to rheumatology referral was 4 days. In 3 cases, there was documentation of 4-5 days use of colchicine prior to referral to rheumatology.

There may be several reasons for poor uptake of history, musculoskeletal examination and investigations. Firstly, the importance of these processes may be underestimated due to lack of awareness of relevant differential diagnoses. Secondly, it might be assumed for those being referred to a musculoskeletal specialist, that bloods, aspiration and imaging will be undertaken or requested by the specialist, and therefore it is not considered good time management to perform these until specialist review. Poor uptake of knee aspiration may reflect lack of experience or time of seniors on the general medical ward to teach joint aspiration. Of those patients audited, the majority of knee aspirations performed prior to rheumatology referral were performed by an SHO who had recently gained independence in knee aspiration during her rotation on the rheumatology ward. It must be noted that in 1 case, a patient was referred with acute swelling of a joint other than the knee, but on rheumatology review, obvious knee synovitis was also present. Therefore, acute knee swelling had not been detected, reflecting either lack of full musculoskeletal examination or difficulty in recognizing synovitis, which may further explain the low uptake of appropriate investigations.

To improve the management of patients on the general medical ward with acute joint swelling, clinical guidelines are being re-published within the general medical guidance folder of our trust internet for ease of access. Rheumatology registrars and consultants also undertake supervision for knee aspiration for other medical registrars and core medical trainees, in joint injection clinic and on the wards where possible. Obtaining funding for a knee model for our clinical skills lab and inclusion of a skills lab session for knee aspiration in the core medical teaching programme will be of further benefit for achieving competence in knee aspiration for general medical trainees. Repeating the audit cycle one year after these changes have been made will demonstrate the effectiveness of these changes.
PATIENT ATTITUDES TO NEW NATIONAL ON-LINE PAEDIATRIC RHEUMATOLOGY TRANSITION DOCUMENTATION
Katie Patterson1, Cath Thwaites2, Alex Tabor3, Jon Packham2.

1. Medical School, Keele University.
2. Haywood Hospital.
3. University Hospital of North Staffordshire.

Background:
It is crucial to ensure a smooth transfer of care from paediatric rheumatology to adult rheumatology services. To assist planning this transfer and to ensure that adolescents are well equipped to feel in control of this transition, a new national web based resource for transitional care ‘Ready, Steady, GO!’[1] has been developed. This has now been accepted by NHS England and is available free to UK paediatric rheumatology services.

Aims:
A pilot evaluation to assess readability and acceptability of the ‘Ready, Steady, GO!’ documents to adolescents attending a paediatric rheumatology clinic in Stoke on Trent, an area with poor literacy rates.

Methods:
Ten consecutive adolescent patients attending a paediatric rheumatology follow up clinic were asked their opinions about the new on-line transition documents and their understanding about questionnaires within the programme. Patients aged 10-13 assessed the ‘Ready’ questionnaires, 14-15 assessed the ‘Steady’ questionnaires and patients aged 16+ assessed the ‘GO!’ documentation. Patients were asked about how they perceived transition to adult services in the context of the new ‘Ready, Steady, GO!’ programme. In addition, rather than completing the questionnaires, they were asked to comment on the their understanding of the words and phrases within the documentation.

Results:
Many patients expressed some reservations and apprehension about moving to adult services, with relatively limited current knowledge of transition processes. "I feel unsure, I don’t know what to expect" When asked about the ‘Ready, Steady, GO!’ programme 9/10 gave positive responses, the remaining patient exhibited the most problems with understanding and literacy."I like the idea of them checking if you’re OK to move to adult services” Most patients felt the content of the questions was appropriate, a minority expressed concerns around comprehension."It is long winded and some of the questions are... complex” In the individuals who felt they understood the questions, on direct questioning, some lack of understanding the precise meaning of questions became evident. In addition, there were specific recurring words/phrases that caused a number of individuals comprehension problems, including: procedures, shared decision making, fatigue, self-advocacy, eligibility, appropriate eating.

Conclusions:
There was clear enthusiasm from adolescents for the new national ‘Ready, Steady, GO!’ web-based programme. Within this small pilot evaluation, there were some issues with the complexity of the vocabulary used within the questionnaires, affecting both readability and understanding. These could easily be addressed as the programme is developed further.

References:
Posters
RETROSPECTIVE AUDIT ON MANAGEMENT OF GIANT CELL ARTERITIS AT UNIVERSITY HOSPITALS COVENTRY AND WARWICKSHIRE

Gayed M1 Adzie T1 Chaudhuri K1

1. University Hospitals Coventry and Warwickshire

Background/Purpose
We carried out a retrospective survey of all patients in the past 30 months, who had a temporal artery biopsy at University Hospitals Coventry and Warwickshire, due to a clinical suspicion of Giant Cell Arteritis.

Aims and Objectives
We assessed compliance with BSR Guidelines of management of suspected giant cell arteritis at University Hospitals Coventry and Warwickshire. We also assessed the correlation between positive ultrasound and positive biopsy as well as the relationship between positive ultrasound and ophthalmic complications. Furthermore record was made of how frequently both ultrasound and biopsy changed management.

Methods
We used the pathology department database to identify patients who had a biopsy between September 2011 and March 2014. We analysed clinic letters to obtain clinical information and also gathered data on those patients who had also had temporal artery ultrasound.

Results
There were 89 patients with suspected Giant Cell Arteritis in our study. 16 patients had a positive biopsy. 4 of these patients had positive ultrasound. There was one further patient with a negative biopsy and a positive ultrasound. Median length of time on steroids prior to ultrasound was 1 day. 3 out of our 5 patients with positive ultrasound had visual loss. In 8 cases steroids were rapidly tapered on the basis of a negative ultrasound and biopsy. 81% of patients had Calcium and Vitamin D co-prescription, 55% had Bisphosphonates co-prescribed, 67% had adequate patient education and 88% were given guidance on frequency of monitoring.

Conclusion
Though the numbers were small, there appeared to be a correlation between positive ultrasound and visual impairment. Ultrasound and biopsy appeared to give clinicians increased confidence in rapidly tapering steroids. Thus the use of ultrasound in our department has helped reduce cumulative dose, and therefore morbidity associated with use of glucocorticoids in suspected giant cell arteritis.
A DUBIOUS CASE OF HIP PAIN

Dr Kehinde Sunmboye¹
Dr Arumugam Moorthy¹
1. Rheumatology Department, University hospitals of Leicester

Abstract

22yr old man usually fit and well, presented with a 2 week history of gradual onset bilateral hip pain. He had more pain in his right hip compared to his left and he had developed difficulty in weight bearing mainly due to pain. He had occasional bouts of fever but no night sweats and he otherwise felt well in himself. He did not smoke or drink and had no recent history of travel abroad.

Examination revealed a well looking man with low grade pyrexia of 38.2°C and reduction in hip movements bilaterally mainly limited by pain. His investigations showed a raised CRP of 235, slightly raised liver enzymes and normal pelvic x-rays. He was started on antibiotics for presumed septic arthritis which were stopped after this was ruled out by orthopaedics. Following rheumatology review, MRI of both hips were requested. This showed abnormal STIR (inflammatory) signal in both psoas muscles bilaterally with possible narrowing of the pelvic vessels due to suspected vasculitis.

Due to the lack of agreement between the clinical findings and imaging, the patient was evaluated again. A CT abdomen was requested to rule out extrinsic compression accounting for the narrowing of the pelvic vessels. A large retroperitoneal mass was found on CT compressing the aortocaval vessels. The patient had a biopsy of the mass and it showed dysplastic, atypical cells suspicious for malignancy. Tumour markers revealed alpha-fetoprotein levels >3,000. He is currently having chemotherapy under oncology for a diagnosis of germ cell tumour.
Introduction
This case series describes three patients with rheumatoid arthritis who had all had an ankle stress fracture. In all three cases the fractures were not detectable on XR imaging and only diagnosed on MRI. In two cases the patient went on to have a stress fracture of neck of femur.

Stress fractures
Stress fractures can be difficult to diagnose in patients with rheumatoid arthritis. Presentation of an acutely painful swollen ankle joint may be wrongly presumed to be a flare of their inflammatory disease. This may lead to a delay in diagnosis of stress fracture. In one case series the mean delay to diagnosis or stress fracture was 31 days (Paran et al, 20001).

Osteoporosis is common in the pathophysiology of stress fractures. Two of these patients have osteoporosis but were on treatment. One case control study has suggested that bone mineral density measurement itself is not a strong predictor of stress fracture, but prior corticosteroid use is, particularly in high doses (Kay et al. 20042).

Methotrexate Osteopathy
Methotrexate in high doses for chemotherapy treatment of malignancies in children may cause bone pain, osteoporosis and fractures. There have been some studies suggesting that methotrexate in low doses used for inflammatory arthritis can induce osteopathy. The first case report of two such patients had iliac crest biopsies which showed osteoblast inhibition, thought to be the mechanism by which methotrexate induces osteopathy. (Preston et al, 19933) However one group has found no effects of methotrexate in vitro or in vivo in low doses in participants with rheumatoid arthritis (Minaur et al, 20024).

There are reports of resolution of symptoms and XR changes after withdrawing methotrexate. However, the majority of these studies are small 2-3 patient case reports. In some instances no mention of BMD measurement in made (Alonso-Bartolome et al, 20065). The majority of patients have been of varying doses of glucocorticoids in the past and bone biopsy was performed in only few cases.

Conclusion
It is important to suspect stress fractures in patients with rheumatoid arthritis, even if initial XR imaging appears normal. Also, have high index of suspicion of further fracture in patients with a history of stress fractures.

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Schnitzler’s syndrome is rare and disabling condition that is under-recognised yet well documented. The diagnostic criteria are well defined, the predominant features being fever, chronic urticaria and a monoclonal IgM paraprotein band. We present the case of a 55 year old male who was referred to the Dermatology outpatient department with an intermittent pruritic rash wholly resistant to therapy available in primary care. No diagnosis was reached and his symptoms continued. He subsequently developed an accompanying fever and was referred on to infectious diseases. He was extensively investigated, with additional input from six hospital departments, but after 3 years, he was still without diagnosis. He was referred on to the care of the Rheumatology team where he was assessed without notes; it was clear the disease was of an inflammatory origin. A Google search with terms “urticaria”, “fever” and “bone pain” raised the possibility of a diagnosis of Schintzler’s Syndrome. A repeat serum protein electrophoresis now showed an IgM paraprotein. A diagnosis of Schnitzler’s disease quickly ensued and was confirmed by the haematology team. He was successfully treated with Anakinra, an Interleukin-1 receptor antagonist, which he is still receiving currently to good effect. From the initial GP referral, it took 4 years until a satisfactory diagnosis was reached. This case demonstrates the value of clinicians being open to all diagnostic possibilities, including diseases they may never have heard of or seen before. It also shows how a Google search, often much derided, can be of diagnostic utility. To our knowledge, this is only the second documented case of the diagnostic IgM paraprotein band in Schnitzler’s syndrome appearing many years after well-established clinical features.
76 yr old lady presented to eye casualty in Coventry with tunnel vision in l eye and some loss of visual acuity in both eyes on a background of HT and DM. She did have jaw claudication, but no headaches or scalp tenderness. Investigations revealed high inflammatory markers, and biopsy of L temporal artery showed typical features of GCA. She was referred to rheumatology at this stage.

She responded well to steroids initially, but with reduction of steroids, her symptoms tended to return, including worsening of vision. She was tried on Azathioprine, but was intolerant to it. OGD was performed due to anaemia and was normal. Despite absence of history of weight loss, or change in bowel habit, a colonic tumour with possible metastases in the kidney was found. She underwent a hemicolecetomy and partial nephrectomy, and is currently doing very well with no features to suggest active GCA, though some visual loss persists. She continues to be on steroids, but is currently tapering down.

Literature review reveals mixed reports with some studies showing a negative association between the diagnosis of cancer and GCA, but one study suggests an increased association of colonic cancer in pts with GCA (Kermani et al). It is difficult to be certain whether this patient’s problems are co-incidental or associated, although the clinical picture would suggest an association between the two.

**Title:** To What Extent Are We Following NICE Guidelines in the Switching of Biologic Drugs in Rheumatoid Arthritis (RA)?

**Thwin Aye**

**Background:** Biologic drugs are increasingly used in patients with Rheumatoid Arthritis. As these drugs are expensive and have potential serious side-effects, NICE has produced guidance on when biologic drugs could be initiated as well as when a patient could switch from one biologic to another. It is therefore important that we adhere to published guidance in the use of biologic drug, so as to maximize the use of limited resources and ensure patient safety.

In 2012, the Rheumatology Department in Kings Mill Hospital, Nottinghamshire, was involved in a regional audit, looking at NICE compliance in switching biologic drugs in patients with Rheumatoid Arthritis. In the regional audit, the Department achieved 77% compliance with NICE guidance. Following this audit, various changes in practice have been implemented in the way we manage biologic drug switching.

**Objectives:**
1. To determine whether the Rheumatology department in King’s Mill Hospital is better at managing patients with RA who require a switch in biologic drugs in accordance with NICE guidance, following the changes implemented after previous audit; 
2. To assess the prescribing patterns of biologic drugs in patients with RA; 
3. To analyse any constraints in selecting different biologic drugs in RA. 
4. This re-audit is to close the ‘audit loop’ ensuring that the department continues to ‘provide best care for patients’.

**Methods:** This audit was carried out against the standard NICE TA 195, 186, 225, 247 and NICE biologic pathway, with retrospective case notes review and reviews of existing data from Rheumatology biologic database. **Inclusion criteria:** At least 1 biologic switch for RA during January 2012 to December 2012 and Analysis by using Excel.

**Results:** In 2011, 13 patients were switched and in 2012, 18 patients were switched from one biologics to another. Most patients were female in both 2011 and 2012.

7 have positive Rheumatoid Factor and 3 have positive anti CCP in 2011 and 11 have positive Rheumatoid Factors and 5 have positive anti CCP in 2012, respectively.

12 patients (n=13) had one switch and 1 patient switched twice in 2011. In 2012, 15 out of 18 switched once and 3 switched twice in 2012 (n=18).

Adalimumab, Etanercept and Rituximab were most commonly used biologics in 2011 and use of more biologics in 2012.

In 2011, out of 13 patients 7 switched from anti-TNF to Rituximab and among the 7 patients, 3 used Rituximab without Methotrexate (MTX). 6 out of 13 switched from anti-TNF to anti-TNF. Among those 6 patients, 3 were switched inappropriately due to lack of efficacy of the drug.

In 2012, 15 (n=18) were switched appropriately according to NICE guideline. 8 patients out of 18 were switched from anti-TNF to Rituximab and all patients who were switched to Rituximab were with concomitant MTX. Only one patient switched from Tocilizumab to Rituximab didn’t use concomitant MTX. There was use of more biologics such as abatacept, certolizumab and tocilizumab in 2012. Although, it was found out that continuing biologics in 7 patients who were not adequately responding to treatment at 6 months with DAS improvement <1.2 at 6 months

**Conclusion:** In 2012 there is more compliance with NICE guidance in switching biologics compared to 2011 (15 out of 18 were switched appropriately and 8 out of 9 patients switched to Rituximab used concomitant MTX. Availability of more biologics in 2012 and therefore there is some changes in prescribing pattern of biologics in 2012.

**Recommendations:** Adherence to current NICE recommendations and use of MTX with Rituximab are advised; if it is inappropriate to use MTX, use anti-TNF as monotherapy. Review DAS improvement score after starting biologics and then every 6 months as per NICE guidance.
A PATIENT WITH UNMANAGEABLE LEG PAIN

Thwin Aye

Background: 58 year old gentleman was admitted with an eight month history of extremely painful and progressive leg ulcers. He had been on hydroxycarbamide for many years to treat Essential Thrombocythemia. On examination, he had severe multiple ulcers to both medial and lateral aspects of his left leg. All investigations were negative for Vasculitis and Vasculopathy. Histology was inconclusive. There was no improvement despite receiving a 4 week course of dressing and leg elevation in hospital. A literature search revealed a few cases of Hydroxycarbamide induced leg ulceration. Hydroxycarbamide was subsequently discontinued in our patient. After 6 weeks, his ulcers considerably improved and subsequently a skin graft was performed.

The lesson is that it is important to recognise the association between leg ulcers and hydroxycarbamide. Withdrawing the drug will promote healing.

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