Guest Editorial

Rheumatology

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Asgar Kalla's research interests include osteoporosis in rheumatic diseases, disease activity and disability assessment in rheumatoid arthritis, monitoring of disease modification in rheumatoid arthritis, toxicity profiles of slow-acting anti-rheumatic drugs, NSAID gastropathy and mechanisms of bone loss in rheumatic diseases.

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This edition of *CME* is devoted to rheumatology, the medical discipline concerned with acute and chronic pain involving the musculoskeletal system. The topics were selected to provide a simple and practical approach to the wide spectrum of disorders encountered by the general practitioner, but will also be useful to medical students as well as general physicians. It is hoped that the reader will appreciate the importance of careful clinical examination and logical interpretation of symptoms and signs in arriving at a diagnosis and planning treatment.

The musculoskeletal examination should be systematic and should aim at evaluating individual articulations as well as the contractile structures involved in moving individual joints. Referred pain is common and should always be considered as a source of pain in a joint, e.g. myocardial infarction presenting with pain in the left shoulder or a ruptured ectopic pregnancy causing shoulder pain due to irritation of the diaphragm by blood in the peritoneum. The systematic evaluation outlined in the algorithm is fundamental to assessment of joint pain. In many respects it is as important as the differentiation between upper motor and lower motor sources of weakness or identifying the first and second heart sounds in evaluating a murmur audible at the precordium. The pathological diagnosis can be pursued once it is decided whether the source of musculoskeletal pain is articular, periarticular or referred.

The pathological conditions are discussed in the subsequent articles and include inflammatory diseases like rheumatoid arthritis (RA), systemic lupus erythematosus (SLE), gout, psoriatic arthritis (PsA), etc.; degenerative joint disease (osteoarthritis (OA)); or non-articular disorders such as tennis elbow, supraspinatus tendinitis and fibomyalgia syndrome (FMS).

The paper by Professor M Ally provides a useful approach to upper limb pain syndromes, re-iterates the role of careful clinical examination and discusses a number of causes of pain in the different areas of the upper limb from the shoulder down to the fingers and hands. The paper emphasises the rarity of primary OA in the shoulder, elbow and wrist and provides useful clinical methods used in the diagnosis of carpal tunnel syndrome and De Quervain's tenosynovitis. Frozen shoulder is characterised by a specific pattern of limitation of passive movement of the shoulder and is usually misdiagnosed in patients with supraspinatus tendinitis.

Dr M Makda and Professor M Tikly provide a superb approach to the protean manifestations of the different connective tissue diseases such as SLE, scleroderma and idiopathic inflammatory myopathy. The approach is based on different symptoms such as Raynaud's phenomenon, skin rashes and muscle weakness. This group of diseases are usually multi-system in nature and can affect many different organs in isolation or simultaneously. Auto-antibody tests are very important in the diagnosis of these disorders and the authors provide a very useful table to help in the interpretation of positive results. The paper highlights the need to interpret these tests in the context of the clinical syndrome in which they are present. The importance of urine microscopy in the evaluation of patients with SLE is emphasised. Guidance is also provided regarding the indications for renal biopsy.

Gout is becoming increasingly common and remains one of the most poorly treated conditions in general practice. The paper by Dr BJJ van Rensburg provides a practical approach to the patient and discusses important issues regarding management. The most important goal is to reduce the level of uric acid in the blood.

The lungs are often involved in the different rheumatic diseases and patients may succumb due to pulmonary hypertension and cor pulmonale secondary to restrictive lung disease. The paper by Dr IS Kalla reviews the spectrum of rheumatic diseases and how they affect the lungs. It provides a useful approach to assessing the chest X-ray (PAINT) and emphasises the need for HRCT and lung function tests in the evaluation of these patients. The paper also emphasises the importance of considering infectious aetiologies. Pulmonary hypertension remains very difficult to treat and contributes significantly to morbidity and mortality in patients with rheumatic diseases.

Professor M Ally and Dr F Suleman provide an excellent approach to lower limb pain syndromes. Many patients with mild OA of the hip or knee present with severe pain. Careful examination allows the practitioner to differentiate between knee arthritis and pes anserine bursitis, or hip arthritis and trochanteric bursitis. Lumbar spine pathology may also cause pain to be referred to different sites in the lower limbs. Premature OA of the hip may be due to avascular necrosis (AVN).

While RA is predominantly a musculoskeletal disease, it is associated with several systemic features, particularly involvement of the eyes. Dr N du Toit provides an excellent review of the important structures in the eye that can be affected in patients with RA. The painful red eye in a patient with RA is one of the few medical emergencies encountered in rheumatology and may result in blindness if not treated aggressively, early on at the onset. The mechanism is usually related to inflammation, but may sometimes be a complication of therapy, as with chloroquine treatment. The rheumatologist and ophthalmologist need to work closely together to ensure a favourable outcome from some of these serious complications of RA.

Dr Gcelu and Professor Kalla emphasise the importance of diagnosing RA early to have a maximum effect on modifying the disease. New criteria were published in 2010 and the paper discusses the current recommendations for evaluating response to therapy using modifications of the disease activity score (DAS). The 28 joint count provides a simple tool for assessing swelling and tenderness and allows the practitioner to obtain a good index of the extent of inflammatory joint disease. A simple score can be obtained in the clinic room (excluding CRP) and disease activity can be scored numerically at each visit. Remission is now clearly defined and is becoming an achievable goal, especially with the advent of newer therapies.

The development of biological molecules (monoclonal antibodies against different cytokines) enables us to target basic immune mediators of damage in RA, such as tumour necrosis factor alpha, interleukins 1 and 6, B-cell depletion, etc. Dr Elsa van Duuren provides an excellent overview of the plethora of these agents that are now becoming available for use in patients with RA and other rheumatic disorders. These biological agents are highly effective, have a rapid onset of action and can be administered intravenously, subcutaneously or orally. They have a relatively low toxicity profile and are generally well tolerated. Their use is currently limited by the cost constraints in

the medical system and the TNF-alpha blockers have been shown to exacerbate or reactivate TB.

OA has long been regarded as a 'wear and tear' disease. However, as reflected in the paper by Dr B Hodkinson and Professor M Tikly, relatively little is known regarding the basis for the cartilage changes that occur in this common disease. A great deal of research is being done, but progress is extremely slow. Paracetamol remains the first line of treatment for OA, but there is also a role for the use of NSAIDs.

Dr N Patel and Professor G Mody provide a current review of the fibromyalgia syndrome and the newer classification method. The condition is common and may produce serious challenges with respect to insurance claims and loss of work, especially when chronic widespread pain follows a traumatic event such as a motor vehicle accident (MVA).

Professor GM Mody and Dr N Patel have put together an excellent paper on the articular syndromes associated with HIV infection. The commonest syndrome is that which resembles seronegative spondyloarthritis and the largest experience comes from Zambia. Fortunately, there is a decline in prevalence due to treatment with antiretroviral drugs (ARVs). An emerging problem in this context is the development of immune reconstitution syndrome, which may result in auto-immune diseases.

I trust that the reader will find the articles to be useful and that this edition of *CME* will enable practitioners to deal with musculoskeletal complaints more confidently.