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How does rheumatoid arthritis need to be managed?

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Rheumatoid arthritis (RA) is the most common cause of persistent inflammatory polyarthritis, affecting 0.8% of the UK population with a potentially painful, progressive, damaging and disabling condition that shortens life expectancy.[1] It has become increasingly clear that the disability associated with RA is largely preventable if appropriate treatment strategies are introduced in a timely fashion. The new National Institute for Health and Clinical Excellence (NICE) guidelines provide up-to-date evidence-based recommendations on high-quality care for people with the disease.[1,2] However, reports by both the National Audit Office and the King's Fund for the Rheumatology Futures Group have demonstrated that the provision of good care is still patchy across the UK.[3,4] In many parts of the country, rheumatologists are only too aware of the gaps between the levels of service that they are currently able to provide and those to which the NICE guidelines would have them aspire.

The need for early diagnosis and treatment

There are considerable challenges for general practitioners (GPs) in making an early diagnosis of inflammatory arthritis that may, or may not, evolve into RA. It is important to realise that there are no specific diagnostic tests for inflammatory arthritis, and that the detection of inflammation of joints (synovitis) remains a clinical skill. This in turn relies on being able to recognise the cardinal symptoms and signs of inflammation in joints (pain, swelling, heat, loss of function and sometimes redness of the joints), along with stiffness particularly in the morning. There are classification criteria for RA, but these were designed for research studies in established disease and perform badly in a clinical setting as an aid to the detection of early RA.[5] Blood tests can sometimes help, but may produce both false positive and false negative results (such as rheumatoid factor which is often negative in RA and conversely can be positive in many people who never develop the condition). If waiting for the results of tests causes further delay in referral to specialist care, and if normal results may actually give a false sense of security, it was argued at the conference that it is better for them not to be performed at all, and for patients to be referred promptly because of clinical concerns alone.

Any persistent synovitis in any distribution that is not spontaneously resolving merits a specialist opinion, but certain patterns of synovitis which carry a particularly poor prognosis should be referred more urgently. Although, the RA classification criteria perform poorly in helping with correct early diagnosis they are good at identifying those patients with a poor prognosis.[6] The more joints that are inflamed (particularly if hands and feet are affected), the less likely they are to remit. A simple but highly informative test is to squeeze across the metacarpophalangeal or metatarsophalangeal heads. If this is painful, particularly symmetrically, an urgent referral is warranted irrespective of the results of any tests that might have been performed.

Another diagnostic challenge relates to the fact that, while most GPs will have a reasonable number of patients with established RA, new onset disease is relatively uncommon, with most GPs only seeing one new case every one to two years. The peak age of incidence is in the 70s, so that patients who already have some osteoarthritis may be difficult to diagnose correctly if RA becomes insidiously superimposed. Most patients do not suddenly develop a polyarthritis, but the disease gradually develops in an additive pattern often over weeks and months.

Despite all of these challenges in making an early correct diagnosis, the actual time from a GP considering a diagnosis of inflammatory arthritis to obtaining a specialist opinion has decreased. This suggests that having a low threshold for thinking of the possibility of inflammatory arthritis and making an appropriate specialist referral are issues which primary care colleagues have identified. In fact, the greatest current delay, measured from symptom onset to starting on medications that can influence the progress of the disease, is in patients delaying going to see their GP in the first place. It was suggested at the conference that a public health campaign is needed to highlight the importance of certain symptoms and signs to patients, so that they do not put off presenting themselves to their GP. If a person has delayed going to see their GP, then this should be another reason for seeking an urgent specialist opinion.

Why the fuss over these delays? Evidence has accumulated that time is of the essence in early inflammatory arthritis, because uncontrolled inflammation translates into damage to joints, which then leads to disability.[7] Studies of early inflammatory arthritis vary, but approximately 50% of patients will have X-ray evidence of irreversible damage in their first year of disease, and 40% of RA patients will have to stop work within five years of the diagnosis.[7,8] Relief of symptoms is important in RA, with pain

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This article is based on a symposium which was organised by the National Clinical Guideline Centre and the British Society for Rheumatology and held at the Royal College of Physicians on 18 June 2009 to mark the recent publication of the National Institute for Health and Clinical Excellence clinical guideline for the management and treatment of rheumatoid arthritis in adults[1,2]

being top of the list of patient priorities. However, analgesics and non-steroidal anti-inflammatory drugs are inadequate as a sole response to joint inflammation. Patients urgently need to start drugs that can modify the course of the disease by dampening the inflammation, and thus slowing down the disease progression.

Evidence shows that methotrexate is the drug of choice, and should be used as the anchor drug onto which others may be added. For active early RA, the evidence from meta-analyses, and from a cost-effectiveness model that was specially constructed by health economists for the NICE guidelines, shows that combination therapies are more effective than monotherapies.[1] Furthermore, studies of successful combination therapies have always used steroids in some form or another (either intramuscularly, intra-articularly or orally). The message is to suppress the disease early, aggressively and intensively. Patients with active RA should be followed up on a monthly basis, with measures of disease activity recorded, and with further efforts to suppress disease that is not coming under satisfactory control. This type of management, treating to a regularly monitored target of disease suppression, can result in dramatic benefits for patients in preventing RA progression and disability.

Conference programme

The need to identify rheumatoid arthritis (RA) early
David Morgan, Bath Row Medical Practice, Birmingham and Raashid Luqmani, Nuffield Orthopaedic Centre, Oxford

The need to intervene aggressively
Patrick Kiely, St George's University of London

The need to monitor patients closely
Sheena Hennell, NHS Wirral

The need to help with the symptoms of RA
Louise Warburton, Shropshire

OLIVER-SHARPEY LECTURE

Rheumatoid arthritis: assessing disease activity and outcome
Deborah Symmons, University of Manchester

The need for physiotherapy in RA
Jane Hall, Royal National Hospital for Rheumatic Diseases NHS Foundation Trust, Bath

The need for occupational therapy and patient education in RA
Alison Hammond, University of Salford

The need for podiatry in RA
Anthony Redmond, The Leeds Teaching Hospitals NHS Trust

The need for surgery in RA
Colin Howie, Lothian University Acute Hospitals Trust, Edinburgh

The patient's view: the benefits of guidelines for patients
Enid Quest, Bristol

The patient's view: what are the unresolved issues in managing RA?
Ailsa Bosworth, chief executive, National Rheumatoid Arthritis Society

Overview: What are we trying to achieve in managing RA?
David Scott, King's College Hospital, London

The need for a multidisciplinary team

Although the management of many aspects of RA has improved substantially, some patients who have an early diagnosis with intensive interventions will still not achieve disease remission. All patients should be offered education about their disease, and the treatments used, so that they can become more involved in their own management should they so wish. The many impacts that RA has on a person's life mean that many specialists may be needed to help manage the disease at various times. It is important that patients have a named contact in the multidisciplinary team who can coordinate access to specialists, ensure rapid access for emergencies like flare-ups, and organise annual structured and objective assessments both of the control of the disease and impact on the joints, and also monitoring for other organ and system involvement (such as the increased risk of cardiovascular disease and osteoporosis). In most teams it will be a specialist nurse who is best suited to provide this coordinator role for patients.

Other members of the multidisciplinary team play key roles. Physiotherapists improve general fitness of RA patients by encouraging regular exercise for joint flexibility and muscle strength, managing other functional impairments and providing non-pharmacological pain relieving modalities. Occupational therapists not only assist with difficulties in coping with everyday activities, but also with hand function problems and psychological interventions such as relaxation and cognitive coping skills. Feet are often ignored in RA by professionals. Access to podiatry will be essential for most patients, with assessment, review, and enabling the provision of therapeutic insoles and footwear when indicated.

Despite advances in medical care, many patients will need orthopaedic opinions during their disease, particularly for persistent pain through joint damage or other soft tissue cause, worsening joint function, progressive deformity, or persistent localised synovitis. Orthopaedic surgeons should be seen as invaluable colleagues in the multidisciplinary team, and their opinion sought sooner rather than later when medical interventions are not resolving a patient's musculoskeletal problems. Because the long-term durability of prosthetic joints is improving all the time and due to the revolutionary effect that joint replacements can have on people's lives, younger people who would not normally be considered for joint replacements should not be denied access.

The future

Guidelines are of no value if they simply occupy bookshelves and are never translated into clinical practice. The Department of Health, with specialist and patient input, has designed an

Inflammatory Arthritis Commissioning Pathway that is populated with the recommendations form the NICE RA guidelines. This provides a template for purchasers and providers to design a service that is guideline compliant.[9] In these tough economic times for the NHS, specialist services will have to show flexibility in the way they allocate resources, showing a willingness to use current funds differently, as well as documenting where implementation of the guidelines cannot happen without further income.

There are many research questions that remain unanswered in RA. There is plenty of evidence for the treatment of early active disease, but a lack of knowledge about the most appropriate interventions for milder inflammatory arthritis. There is a need for more objective assessments of synovitis with imaging modalities such as ultrasound and magnetic resonance imaging, both for diagnosis, prognosis and the impact of therapeutic interventions. It was suggested at the conference that more specific biomarkers of disease (such as the promise shown with anti-cyclic citrullinated peptide antibodies) may need to be incorporated into clinical practice in a way that makes best use of resources.

These are exciting but challenging times for RA management. The NICE RA guidelines give a tremendous opportunity for improving the quality and uniformity of care to patients across the UK. Our patients deserve to see their implementation in full.

Disclaimer

This article is the view of the authors and does not necessarily represent the views of the National Institute for Health and Clinical Excellence.

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