Annals of the Rheumatic Diseases

Leaders

Evidence-based medicine or medicines-based evidence?

The “evidence-based medicine” movement has grown quickly since its introduction to the medical literature a few years ago.¹ Although there has been some confusion as to what it is and what it isn't² it is impossible to argue against the basic premise that healthcare professionals should have access to the best and most up to date evidence when recommending an intervention for any given patient predicament. The movement has been facilitated by the parallel development of the Cochrane Collaboration, which aims to provide in depth reviews of all randomised controlled clinical trials in any given subject area, thus providing one of the most important information databases to aid the practice of evidence-based medicine.³ The Cochrane Collaboration has grown massively over the four years of its life, and now involves centres worldwide and a database that includes over 1500 reviews⁴ and material of relevance to almost all aspects of medical practice. The Cochrane database is being used more and more as an aid to rational management.

How far has rheumatology got within this important movement? A review of the 1997 Cochrane database⁴ suggests that our specialty is lagging badly behind most others, and that we remain obsessed by dangerous drugs of doubtful benefit. Of the 15 completed reports in the musculoskeletal section, most are concerned with fractures, or back pain, and three of the four rheumatological titles concern the pharmacological treatment of rheumatic diseases. Of the titles currently registered as protocols for development, again, most are on fractures or other forms of musculoskeletal injury (developed by the Musculoskeletal Injuries Group) or concerned with neck and back pain (coming from the Back Group), and almost all of those on mainstream rheumatology concern pharmacology. Furthermore, some of the pharmacological issues included to date seem to miss the point. For example, it has been pointed out that drugs have little part to play in the management of osteoarthritis (OA)^{5,6} and that the only drug related question that needs to be asked in this area is whether non-steroidal anti-inflammatory drugs have any advantage over simple analgesics—NSAID comparisons being an industry driven distraction from the right questions.⁷ However, one of only two completed rheumatological reviews in the Cochrane database concerns a comparison of different NSAIDs in OA.⁸ It has been elegantly shown that trials of NSAIDs with company sponsorship generally come out showing that the drug of the sponsor is better than its comparator, irrespective of the

drug combinations used,⁹ throwing further doubt on the validity of these comparisons.

For the past two decades, much of rheumatology research has been dominated by NSAIDs; their companies and profits having had a huge influence on the bookshelves and travelling habits of rheumatologists, as well as the type of research being undertaken in our specialty. Just as we seem ready to come to our senses and agree that they might do more harm than good,^{7,10,11} along comes the “COX 2” story,¹² which, if allowed to, could well hold us back for another 20 years. Our other pharmacological obsession—the prescription and (arguably) unnecessary monitoring of second line therapy for rheumatoid arthritis—looks set to stay for a while, and is the main theme of the protocols in the current Cochrane database.

The pharmaceutical industry cannot be blamed for any of this—they are only doing their job—rather too well perhaps, although it is surely time that they came up with something that works. The fault lies with clinical rheumatologists and their unthinking collusion with the pharmaceutical industry. It is time that rheumatology got real, and came up to speed with the needs of those with rheumatic diseases and with the evidence-based medicine movement. People with arthritis who come to see us in our clinics want compassionate caring, help with self help, and interventions that are free of side effects; their main concerns are with pain and disability,^{13,14} they are often depressed.¹⁵ There is evidence that psychosocial status maybe a lot more important to their outcome than any pharmaceutical interventions,¹⁶ and yet, because of our drug obsession, the potential side effects of medical interventions are among the greatest fears of many of the patients who come to see us. We have a wide range of interventions that can help with pain, disability, anxiety and depression in our armamentarium, including education, physical therapy, occupational, behavioural and social interventions, chiroprody, drugs, and surgery. The Cochrane database shows us that our colleagues in other specialties, including those whose main interests concern back disorders and musculoskeletal injuries are encompassing many of these facets of treatment in randomised clinical trials and within Cochrane reviews. But rheumatologists, it would seem, remain content to feed their and the industry's obsession with dangerous drugs—and to continue to practise “medicines-based evidence” rather than “evidence-based medicine”.

If we have to review the pharmaceutical area, why not go for some of the key questions, such as whether it is necessary and cost effective to monitor standard second line treatments in rheumatoid arthritis? (If it isn't, just think of the resources that we could free up to do other things). But until we get drugs that work, it is surely of even more importance to our patients that we critically examine the claims made for other more acceptable interventions in rheumatology, such as education and physical therapy—areas in which many randomised controlled trials have been conducted. We should also review the benefits and indications of our most powerful weapon in the treatment of painful arthritis—joint replacement. Let us join the evidence-based medicine movement and Cochrane Collaboration with enthusiasm, meeting the needs of our patients, rather than the interests of the pharmaceutical industry.

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