BRITISH DISPATCH

Bugs, bones, and bioengineering have occupied British rheumatologists in the past year, along with treatment initiatives, advanced radiology, and educational strategies.

Causation

At a symposium in Rochdale on 'Milestones and millstones in rheumatic diseases' Denman suggested that antibodies are largely irrelevant, immune complexes are probably trivial, and advanced microbiological techniques should enable us to identify the initiating organisms of certain rheumatic disorders. The glycosylation defect, reported by Roitt and his colleagues at the Middlesex Hospital, excited enough interest for the British Society of Rheumatology to give it a separate session at its scientific meeting in April. One of the few silver linings to the cloud of HIV infection is the clues to the pathogenesis of seronegative polyarthritis and psoriasis, which may come from data gathered in London and in New York.

Osteoporosis

With the demise of several distinguished Mineral Metabolism Units and the birth of the National Osteoporosis Society, interest has been kindled among rheumatologists in bone diseases as well as joint afflictions. The advocacy of widespread hormone replacement therapy in women after the menopause seems to have been excessive, but a session on the subject at the British Society of Rheumatology meeting in Birmingham drew a full audience.¹

A vigorous correspondence raged in the *British Medical Journal* on the use of calcium in its treatment. The review by Kanis and Passmore² has been described as 'brilliant' by his supporters, and as 'misleading, polemic, and selective' by the opposition. Workers in this field continue to be as brittle as the material with which they deal. During the period of rapid bone loss for five years after the menopause, oestrogen replacement therapy is far more effective than calcium supplements in maintaining bone mass, and has been shown to prevent fracture. Calcium supplements may have a minor role in reducing bone loss in elderly patients and those who cannot take oestrogens, but as far as I am aware they have not been shown to prevent fracture. The rate of bone loss and bone mass do not matter to patients—the prevention of fracture does! Until the experts make up their minds it seems sensible to follow the opinion of the recent consensus conference,³ 'In postmenopausal women with established osteoporosis and women recognised to be at high risk of fracture it seems prudent for physicians to recommend a calcium intake of about 1500 mg a day'. Otherwise, 'A daily nutritional requirement of 800 mg is recom-

mended for Euroid women, with higher requirements likely in childhood, in adolescence, and during pregnancy, and lactation'.

Bioengineering

Bioengineering continues to be one of the lively interfaces with orthopaedic surgery. Several articles on bioengineering topics featured in the *Journal of Orthopaedic Rheumatology* (edited by J M H Moll) launched during the past year. The 1989 Annual Day Conference on 'Growing points in the bioengineering of human joints' in Leeds, organised in association with the Biological Engineering Society, looked at impact dynamics and vibration in rheumatic diseases. Apart from vibration white finger, being studied at Sunderland, the effects of vibration on the spine and on leg joints are being rigorously investigated.

Abernethy at the St Andrew's Day Festival of Rheumatology in the Royal College of Physicians of Edinburgh (chaired by its president elected the previous day, Professor Richmond—a former protégé of Professor Ian Duthie) cast doubt on whether bone grows into uncemented prostheses. He also described how he builds up deficient acetabula with discarded hips from the Bone Bank. Another success story has been the increasing use of the polyester neoligament, developed by Seedhom and Fujikawa,⁴ which stimulates the natural ligament to grow. It not only restores stability in 92% of patients with ruptured anterior cruciate ligaments, but was good enough to place a British contender, Graham Bell, in the top 20 of the Winter Olympics skiing competition for the first time ever.

Treatment

Damage limitation has been the concern of rheumatologists since the case controlled study of Langman and his colleagues at Nottingham showed that patients over 60 taking non-steroidal anti-inflammatory drugs (NSAIDs) are particularly liable to have a gastric catastrophe.⁵ There are, of course, two views on this. The NSAID salesman can truthfully say that the risks are not great, as a general practitioner will write 20 000 prescriptions for these drugs before he sees a bleed. On the other hand, a gastroenterologist in a district general hospital will attribute 300 bleeds annually to them. One speaker at a conference of the Scottish Rheumatological Society in Pitlochry put it in perspective when he suggested a general practitioner would see one bleed every 12 years and one death every 120 years as a result of prescribing these drugs. To reduce this risk the Committee on the Safety of Medicines has licensed misoprostol, a prostaglandin analogue, on the basis that it reduces endoscopic

NSAID gastropathy and allows most of such ulcers to heal. Cimetidine has been licensed also for ulcer-like symptoms associated with NSAIDs. The evidence for the latter's efficacy is well summarised in the proceedings of an imaginative conference, published in *Alimentary Pharmacology and Therapeutics*.⁶ There is every reason to believe that famotidine, nizatidine, and ranitidine are equally efficient. Prescribers would do well to look at the relative prices of these products.

Kirwan has suggested that second line agents have no effect on the progress of rheumatoid disease, and that we should only be treating those patients with a poor prognosis (women with bad arthritis and poor function at presentation, with erosions, and with a positive rheumatoid factor). Sulphasalazine is the first choice of second line agents by many British rheumatologists, largely because of its high ratio of effectiveness to serious side effects. This was reviewed at a conference in Manchester, chaired by Brian McConkey,⁷ who together with the Glasgow and Leeds groups did so much to reinstate this drug for the treatment of rheumatoid arthritis. Even more fascinating is the light its use may throw on the pathogenesis of the disease.

Corticosteroids for treatment of rheumatoid arthritis are being reappraised. Some Scotsmen favour their use, despite inheriting a cadre of such patients with vertebral collapse. Rheumatologists from the south west plan to study the progress of erosions in 180 patients with early rheumatoid arthritis receiving prednisolone 7.5 mg daily for two years. I hope they can wean them from the drug more easily than we can. In more serious disease, such as necrotising vasculitis, the question is which regimen is the best to use. Lennox Holt advocates pulse treatment with oral prednisolone 100 mg daily and cyclophosphamide 5 mg/kg a day for three days. These pulses are given every two to three weeks for three months, being gradually spaced out over the next 9–12 months. H₂ antagonists are given simultaneously to prevent perforated peptic ulcers (of which he has had three).

A well considered conference at Cambridge, on the current state of knowledge on soft tissue rheumatism, explored the Cinderella disease, fibromyalgia (non-articular rheumatism). It disclosed a paucity of new initiatives. These patients, whose disease is often dismissed as 'rubbish' by rheumatologists, form a considerable percentage of those with rheumatic diseases in the community. Their symptoms are often as distressing to the patient as rheumatoid arthritis and deserve therapeutic trials based on carefully considered models of pain amplification. The subject is not 'myomithology'.

Radiology

It is doubtful whether magnetic resonance imaging, the latest expensive radiological

advance, deserves widespread use in rheumatic patients. Sacroiliitis (a notoriously difficult condition) is poorly visualised, but the technique shows soft tissue clearly. Rheumatoid pannus around the odontoid peg is well seen. The technique may help in elucidating back problems by its visualisation of soft tissue, but this remains in the realm of research.

Education

Teaching techniques have advanced during the past two decades, and rheumatologists are latching on to them, judging by an article by McRea *et al*⁸ and an editorial in the *British Journal of Rheumatology* by Wright and Harvey.⁹ Progressive academics are exploring the use of computers in medical education, and are attending conferences, such as the recent one at Cardiff, where they may familiarise themselves with interactive videos.

In a year when the word 'audit' has dominated British medical thinking, even though few seem to understand its meaning or its implications, it is not surprising to learn that the Arthritis and Rheumatism Council's Standing Committee for the Development of Academic Rheumatology is producing criteria against which their future academic investment will be judged. The Royal College of Physicians of London has bared its teeth in a gentlemanly way by publishing a report on audit,¹⁰ which will be part of the baseline for the accreditation of future posts in higher medical training. An extra assessor will be part of the visiting team to look at the implementation of these recommendations.

If the government has its way, 1990 is likely to be a year of turmoil, as its poorly prepared white paper on the future of the National Health Service contains scarcely a mention of the chronic sick. Maybe next year's dispatch will be a funeral oration.

- 1 Calin A. Osteoporosis. *Br J Rheumatol* 1989; 28: 165–6.
- 2 Kanis J A, Passmore R. Calcium supplementation of the diet I and II. *Br Med J* 1989; 298: 137–40, 205–8.
- 3 Consensus development conference: prophylaxis and treatment of osteoporosis. *Br Med J* 1987; 295: 914–5.
- 4 Seedhom B B, Fujikawa K. The Leeds-Keio ligament: biomechanics. Clinical study of anterior cruciate ligament reconstruction with the Leeds-Keio artificial ligament. In: Friedman M J, Ferhal R D, eds. *Prosthetic ligament reconstruction of the knee*. Philadelphia: Saunders, 1988: 118–31.
- 5 Somerville K, Faulkner G, Langman M. Non-steroidal anti-inflammatory drugs and bleeding peptic ulcer. *Lancet* 1986; i: 462–4.
- 6 Pounder R E, Langman M J S, eds. Managing the patient on NSAIDs: Must GI intolerance compromise anti-inflammatory therapy? *Alimentary Pharmacology and Therapeutics* 1989; 2 (suppl 1).
- 7 McConkey B. Ten years of sulphasalazine use in rheumatoid arthritis. *Br J Rheumatol* 1989; 28: 175–6.
- 8 McRae J D, McCredie M R E, McSherry D M G, Brooks P M. A controlled evaluation of diagnostic criteria and the development of a rheumatology expert system. *Br J Rheumatol* 1989; 28: 13–17.
- 9 Wright V, Harvey A R. Rheumatology education in the late 20th century. *Br J Rheumatol* 1989; 28: 95–7.
- 10 Royal College of Physicians. *Medical audit. A first report—What, why and how?* London: Royal College of Physicians, 1989.