

## Rheumatology in general practice — a survey in World Rheumatism Year 1977

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**SUMMARY.** Rheumatological complaints accounted for 10·6 per cent of new presentations in this general-practice survey. Spinal problems formed almost half of this total and led to a greater degree of disability than other locomotor system disorders. Active participation in the treatment of pain by the practitioner's use of manipulation and injection techniques is shown to be quite feasible in general. Forty-six per cent of all hospital referrals were simply requests for physiotherapy, and we suggest that physiotherapy departments should offer open access and so lead to a marked reduction in overstrained rheumatology consultant outpatient clinics.

### Introduction

“THE NHS has neglected victims of rheumatic diseases, forcing many to go for help to unorthodox practitioners.” Thus did the late Dr R. M. Mason (1977), President of the British League Against Rheumatism (BLAR), launch World Rheumatism Year in Britain in 1977.

The recent report, *The Challenge of Arthritis and Rheumatism* (BLAR, 1977), has noted that “Rheumatic disorders are responsible for a large part of the general practitioner's workload”, and goes on to say that “all too often the quality of primary care for patients with these conditions leaves much to be desired”. The broad statistics provided by this report give little insight into the day-to-day rheumatological problems facing the general practitioner.

### Aims

We sought to examine the rheumatological disorders encountered in general practice—their variety, incidence, aetiology, and management—and to describe ways of improving the care provided by the NHS.

### Method

A prospective study was carried out in a London general practice by screening 1,000 consecutive new patients for the rheumatological content of their presenting symptoms. The criterion for diagnosing a rheumatological complaint was its acceptance by one of us (R. A. B. has specialist training in rheumatology) as a distinct rheumatological disorder. Thus, not only was a classification of presenting rheumatological disorders made possible, but also some insight gained into how a trained rheumatologist would manage these complaints in primary care, given only those facilities which are readily available to most general practitioners.

The first and follow-up visits were noted, as were the number and duration of the sickness certificates issued. Methods of treatment (Table 1) have been divided into three groups: those requiring no active treatment; those requiring active treatment; and those patients referred to hospital.

### Results

Of the 1,000 patients seen in the surgery or at home with a new presenting complaint, 106 (10·6 per cent) were diagnosed as having a rheumatological cause for their symptoms. The categories are shown in Table 2. Spinal problems accounted for 46 per cent of all cases, with the lumbosacral spine being the most often affected. There was an almost equal distribution of problems between the upper and lower limbs. Seven patients (6·6 per cent)

**Table 1.** Treatment of 106 patients with rheumatological disorders.

Treatment group	Number of patients	Type of treatment
Active treatment	25	Analgesics
	24	Local anaesthetic corticosteroid injection
	10	Anti-inflammatory drugs
	10	Manipulation
	3	Local anaesthetic injection
	2	Gout therapy
	1	Benzodiazepines
	16	Reassurance, advice
No active treatment	7	Physiotherapy
	5	Rheumatological opinion
	2	Orthopaedic opinion
	1	Radiotherapy

complained of more widespread symptoms (two with muscle pain, two with polyarthralgia, and three with polyarthritis). These problems are classified according to the aetiological basis of the rheumatic disease process (Table 3).

It is clear that most problems fall into the traumatic, degenerative, and soft-tissue nonarticular groups (81 cases or 76.4 per cent). Only five patients (4.7 per cent) had a definable metabolic, neoplastic, or congenital cause. There were four cases (3.8 per cent) of arthritis of unknown aetiology, but there were no new cases of polymyalgia rheumatica, seropositive rheumatoid arthritis, or other associated connective tissue disorders.

#### Investigations

**Radiology.** Thirty-three patients were x-rayed: 57 per cent were investigated for spinal problems, and the remaining 43 per cent for peripheral joint problems. The radiology reports were divided into two groups: those which provided a positive finding relating to the clinical problem, for example, osteoarthritis, sacro-ileitis, or neoplasm, and those in which the radiologist could detect no significant abnormality (Table 4). The fact that no abnormality could be found in 12 patients was considered in some to be a useful negative finding rather than an unnecessary use of x-rays.

**Haematology and biochemistry.** Twenty patients had blood taken for analysis of whom six had a raised erythrocyte sedimentation rate and three had a raised serum uric acid.

The results used clinically enabled the diagnosis of gout to be made in two patients, early seronegative

**Table 2.** Categories of rheumatic problems.

Site of problem	Number of patients
Lumbosacral	29
Cervical	15
Thoracic	5
Shoulder	8
Hand	8
Knee	8
Generalized rheumatic symptoms	7
Wrist	6
Foot	6
Ankle	5
Hip	4
Elbow	3
Temporo-mandibular joint	2
<b>Total</b>	<b>106</b>

articular disease in a further three patients, and ankylosing spondylitis in another.

#### National insurance certificates (sickness)

Thirteen certificates totalling 19 weeks incapacity were issued among the 106 patients with locomotor disorders. Over 50 per cent were issued to the group with lumbosacral problems.

#### Consultations

One hundred and six patients were seen at their first consultation for locomotor disorders, two being seen at home. Sixty-one patients returned for a follow-up consultation, some of whom required more than one such follow-up consultation.

#### Management

Patients presenting with any painful condition need a full assessment of both their physical disability and the effect that this has had on their psychological state. Many rheumatological disorders are mild and self-limiting; others are more painful and prolonged. Table 1 shows that 15 per cent of patients required only simple reassurance and advice about the nature of their complaint, whereas 71 per cent were given some form of active treatment. Half of the patients in this group received a prescription as their main form of treatment, and the other half had either manipulation or a local injection.

The third group demonstrates that 14 per cent of patients required referral to hospital either for treatment or for a second opinion. Almost half of these required physiotherapy only but, since we had no open access to the physiotherapy department, they had to be referred through the rheumatological outpatient department, with the result that treatment was delayed on average by six weeks.

**Table 3.** Classification of the rheumatological problems seen in 106 patients.

Classification	Total number of patients	Diagnosis
Traumatic	35	Mechanical injury to articular and periarticular structures and sports injuries (15)
Degenerative joint disease	26	Primary and secondary osteoarthritis of peripheral joints (11) Intervertebral disc degeneration without nerve root entrapment (10) Intervertebral disc degeneration with nerve root entrapment (5)
Soft tissue nonarticular rheumatism	20	Bursitis (4) Tenosynovitis and tendonitis (7) Tennis elbow (3), neuralgic amyotrophy (1) Adhesive capsulitis (2) Shin splints (1) Trigger finger (2)
Cause unknown	9	Unexplained arthralgias (6) Spinal pain (2) Nodule (1)
Miscellaneous	5	Chondromalacia patellae (3) Metatarsalgia (2)
Arthritis of unknown aetiology	4	Ankylosing spondylosis (1) Seronegative monarticular arthritis (1) Seronegative polyarticular arthritis (2)
Metabolic	2	Gouty arthritis of 1st MTP joint
Congenital	2	Spinal hypermobility (1) Cervical rib syndrome (1)
Psychogenic	2	Rheumatic symptoms secondary to psychiatric illness
Neoplastic	1	Breast secondary in L4 vertebral body

**Table 4.** Radiological investigations.

Radiological findings	Number of patients x-rayed
Significant abnormality detected	21 (64)
No abnormality detected	12 (36)

During the time that these new presentations were being screened, the practice was also engaged with patients already under care for rheumatic disorders. These included two patients with rheumatoid arthritis for regular assessment, one patient with giant cell arteritis (polymyalgia rheumatica) attending for a regular ESR check and adjustment of steroid treatment, and one patient with Paget's disease who was being managed at home with calcitonin therapy, as recommended by a rheumatologist.

### Discussion

The problem nationally is summed up in the figures supplied by the BLAR (1977) that 20 million people experience some form of rheumatic complaint during

the course of a year, and two fifths of these individuals will seek help from their general practitioner. These complaints result in the loss of 44 million working days.

Such figures, whilst exciting the attention of the press (*Daily Telegraph*, 1977), do little to help general practice. Our figure of 10.6 per cent for rheumatic disorders amongst a thousand new presentations compares with the figures reported by Weston and Wood (1971) of 11.1 per cent of all new presentations in a practice during one year, and 9.3 per cent given as the mean figure for rheumatic spells in general practice for 1970 in the *Digest of Data on the Rheumatic Diseases* (Arthritis and Rheumatism Council, 1974). Other studies of rheumatic disorders in general practice (Knox, 1966; Partridge and Knox, 1969; Broderick, 1972) have confirmed our findings that a high proportion of these complaints related to the spine.

### Rheumatology—the subject

The World Health Organization (1972) defines rheumatology as “that branch of medicine concerned with the rheumatic complaints; this term includes systemic disorders of connective tissue, inflammatory arthritis, (osteo) arthrosis, back troubles, and soft tissue (non-articular) rheumatism”. This definition twice defines

rheumatology in terms of rheumatism, which is conveniently left undefined. It is not surprising, therefore, that many authors in general practice refer to "semantic difficulties" (Knox and Kuenssberg, 1964) and "difficulties with definitions". This problem is further aggravated by the recent dispute among rheumatologists as to the precise scope of their specialty (Blower, 1976; Buchanan *et al.*, 1976; Richards, 1976; Swinson, 1976; Cyriax, 1977a) and the role they might be expected to fulfil. The definition of rheumatology and the discussion of its interfaces with orthopaedics, rehabilitation, and metabolic and immune disorders must be a continuous process as medicine advances on a variety of overlapping fronts.

Though primarily a specialist's concern, the varying views within the specialty will directly affect the hospital services available to the general practitioner and his patients. The inability of rheumatologists to decide whether their subject is the "Cinderella of medicine", as implied by Professor Watson Buchanan, or the "belle of the ball" (Dixon, 1977) inevitably leads to further bewilderment among practitioners. The Specialist Advisory Committee of the Joint Committee on Higher Medical Training (1975) defines rheumatology as "that branch of medicine concerned with connective tissue disease and with medical disorders of the locomotor system". This gives a sensible basis for hospital rheumatology services as required by general practice.

The amalgamation of the Royal Society of Medicine's balneology, climatology, and electrotherapy sections into the physical medicine section in 1931, and its change in 1972 into rheumatology and rehabilitation reflect the changing attitudes over the years. It is our clinical impression that, despite these changes, hospital rheumatologists continue to take too narrow a view, leading to poor support for the care of locomotor disorders in general, though it is just these which we show constitute the bulk of rheumatology as seen in general practice. If this view is correct, then further metamorphosis of the specialty is required to adapt to present day requirements.

#### Management in general practice

Table 3 shows that degenerative joint disease, soft tissue nonarticular rheumatism, and trauma formed 76 per cent of the new presentations, with inflammatory joint disease accounting for only 5.5 per cent.

Most publications about the management of rheumatic diseases in general practice deal with pain (Irvine *et al.*, 1965; Dillane *et al.*, 1966; Ward *et al.*, 1968; Wilkinson, 1968; Hutson, 1973; Dossetor, 1975; Barton *et al.*, 1976; Gilchrist, 1976; Barker, 1977). Other papers refer to rheumatoid arthritis (Jaffe, 1963; Knox, 1974), giant cell arteritis (Rhodes, 1976), and gout (Spears and Walker, 1962). Injection techniques were used in 25 per cent of our patients and the value of this method in the early treatment of painful inflamed soft tissue lesions is well documented (Boyle, 1971; Windsor, 1976; Pearlgood, 1977; Yates, 1977).

Manipulation techniques for back pain and peripheral joint problems are also well documented (Price, 1971; Griffin, 1973; Kane *et al.*, 1974; Curtis, 1975; Cyriax, 1977b) and were used to good effect in nine per cent of our cases. Other therapeutic measures such as acupuncture (Perlow, 1973) and traction (Ramsay, 1954) have also been described in general practice, but were not used in our study.

#### Conclusions

According to the Specialist Advisory Committee of the Joint Committee on Higher Medical Training (1975), locomotor disorders are the responsibility of the rheumatologist. We have shown that they provide the bulk of rheumatology seen in general practice. Thus, if the patient is to have his "long wait" reduced (Arthritis and Rheumatism Council, 1977), and the rheumatologist his workload, the general practitioner must be educated in the locomotor disorders by rheumatologists who accept this responsibility.

The general practitioner, while encouraged to handle the classical rheumatological diseases as before, must also learn more about locomotor disorders and their diagnosis and about techniques suitable for application on his own premises. He must be given direct access to physiotherapy departments and educated in the use of them.

This means that in the undergraduate and postgraduate teaching of rheumatology there must be a further shift of emphasis to the kind of 'rheumatism' more commonly met in general practice. Vocational training schemes must pay increased attention to the acquisition, in hospital posts, of the necessary skills. General-practice refresher courses on rheumatology must be recast to avoid the temptation of dwelling on the finer points of immunology, tissue antigens, and so on—vital though these topics are in research—and concentrate more on the practical aspects of locomotor disease. We hope we have shown this to be an important and rewarding part of general practice.

#### References

- Arthritis and Rheumatism Council (1974). *Annals of Rheumatic Diseases*, 33, 93-105.
- Arthritis and Rheumatism Council (1977). *Rheumatism: Why the Long Wait?* London: ARC.
- Barker, M. E. (1977). *Rheumatology and Rehabilitation*, 16, 37-45.
- Barton, J. E., Haight, R. O., Marsland, D. W. & Temple, T. E. (1976). *Journal of Family Practice*, 3, 363-366.
- Blower, P. (1976). *British Medical Journal*, 2, 877.
- Boyle, A. C. (1971). *Update*, 3, 857-867.
- British League Against Rheumatism Working Party (1977). *The Challenge of Arthritis and Rheumatism*. London: BLAR.
- Broderick, G. L. (1972). *New Zealand Medical Journal*, 75, 155-158.
- Buchanan, W. W., Sturrock, R. D. & Dick, W. C. (1976). *British Medical Journal*, 2, 628-629.
- Curtis, P. (1975). *Update*, 10, 753-756.
- Cyriax, J. (1977a). *British Medical Journal*, 1, 1535.
- Cyriax, J. (1977b). *Modern Medicine*, 22, No. 5, 12.
- Daily Telegraph* (1977). 29 April.
- Dillane, J. B., Fry, J. & Kalton, G. (1966). *British Medical Journal*, 2, 82-84.

Dixon, A. St J. (1977). *British Medical Journal*, 1, 1015-1016.  
 Dossator, A. E. (1975). *British Medical Journal*, 4, 32-33.  
 Gilchrist, I. C. (1976). *Rheumatology and Rehabilitation*, 15, 101-107.  
 Griffin, G. A. (1973). *Proceedings of the Royal Society of Medicine*, 66, 423-425.  
 Hutson, M. A. (1973). *Practitioner*, 210, 415-417.  
 Irvine, D. H., Foster, J. B., Newell, D. J. & Klukvin, B. N. (1965). *Lancet*, i, 1089-1092.  
 Joint Committee on Higher Medical Training (1975). *Second Report*. London: Royal College of Physicians.  
 Jaffe, G. V. (1963). *British Journal of Clinical Practice*, 17, 91-94.  
 Kane, R. L., Leymaster, C., Olsen, D., Woolley, F. R. & Fisher, F. D. (1974). *Lancet*, i, 1333-1336.  
 Knox, J. D. E. (1966). *Journal of the College of General Practitioners*, 12, 81-85.  
 Knox, J. D. E. (1974). *Update*, 8, 635-643.  
 Knox, J. D. E. & Kuenssberg, E. V. (1964). *Medical World*, 100, 456-460.  
 Mason, R. M. (1977). *The Times*, 11 January.  
 Partridge, R. E. H. & Knox, J. D. E. (1969). *Journal of the Royal College of General Practitioners*, 17, 144-154.  
 Pearlgood, M. (1977). *Modern Medicine*, 22, No. 5, 32.  
 Perlow, B. W. (1973). *Proceedings of the Royal Society of Medicine*, 66, 426-428.  
 Price, D. I. O. (1971). *Journal of the Royal College of General Practitioners*, 21, 214-220.  
 Ramsay, D. B. (1954). *Practitioner*, 172, 572-574.  
 Rhodes, D. J. (1976). *Journal of the Royal College of General Practitioners*, 26, 337-346.  
 Richards, A. J. (1976). *British Medical Journal*, 2, 811.  
 Spears, J. & Walker, J. (1962). *Journal of the College of General Practitioners*, 5, 195-210.  
 Swinson, D. R. (1976). *British Medical Journal*, 2, 1008.  
 Ward, T., Knowelden, J. & Sharrard, W. J. W. (1968). *Journal of the Royal College of General Practitioners*, 15, 128-136.  
 Weston, A. & Wood, P. H. N. (1971). *Musculoskeletal Complaints in General Practice*. Report of the Seventh European Rheumatology Congress. Brighton, June 1971.  
 Wilkinson, B. R. (1968). *Update*, 1, 325-326.  
 Windsor, B. (1976). *General Practitioner*, 13, 38-39.  
 Wood, P. H. N. & McLeish, C. L. (1974). *Annals of the Rheumatic Diseases*, 33, 93-105.  
 World Health Organization (1972). *Report on Rheumatic Disorders*. Geneva: WHO.  
 Yates, D. A. H. (1977). *British Medical Journal*, 1, 495-496.

**Addendum**

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**Reference**

Wilkinson, P. W., Pearson, J., Parkin, J. M., Philips, P. R. & Sykes, P. (1977). *Lancet*, i, 350-352.

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