PRACTICE OBSERVED

Trainees' Corner: Managing Chronic Disease

Managing arthritis

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This article is based on an audiovisual presentation made for vocational trainees in general practice by the MSD Foundation. Further information about the video-cassette programmes on which this series is based is available from the MSD Foundation, Tavistock House, Tavistock Square, London WC1.

In general practice to manage arthritis of whatever type successfully the general practitioner needs an understanding of the impact of the illness on the patient's whole life. Although prescribing drugs and performing surgery play some part in management there are other equally important actions to take. Many patients need physical aids at home and work, and decisions must be made about physiotherapy, such as correction of posture or when to rest and when to exercise, for all patients with arthritis. Careful psychological support must be given, for the popular image of arthritis is a frightening one. We will refer to the four patients who were discussed in the first article.

Brian Hall: a patient with ankylosing spondylitis

Brian Hall has ankylosing spondylitis. What are the priorities of management for patients like this? Brian will have to live with his condition for the rest of his life so its nature must be fully explained to him. The aims are for him to keep his back and chest mobile and to maintain a normal posture—so avoiding the fixed bowed spine which used to be the final hallmark of the disease. Specific exercises should be advised for this; and pain relief, so essential for all patients with arthritis, should be adequate for its own sake and because performing mobilising exercises may generate more joint pain. The physiotherapist will teach him active exercises to put the affected joints through their maximum range of movement.

The drugs used in Brian's treatment, because they are likely to be needed for years, will probably not include the more toxic drugs such as phenylbutazone, which for so many years was considered the drug of choice. The most commonly prescribed anti-inflammatory drug is indomethacin, given three times daily in a total dose of between 75 and 150 mg. Naproxen suppositories may be used to prevent morning stiffness, but there are many other effective alternatives available.

Spinal radiotherapy, another old favourite, has mainly been abandoned because of its risk of late-onset leukaemia, aplastic anaemia, or, in women, ovarian damage. Surgery is rarely needed for spondylitic patients today. If, however, a patient has reached an advanced state of rigid spinal deformity where he can only see the ground inches in front of his feet and has respiratory problems a mid-dorsal wedge osteotomy may help him to raise his field of vision. Late-stage spondylitic arthropathy in the hip may be relieved by total hip replacement, improving the range of movement and eliminating pain.

Happily, very few patients with ankylosing spondylitis nowadays reach this stage. Nevertheless, most need supportive psychotherapy: they should be seen regularly so that they know someone is interested in their welfare and progress and will supervise their exercise and drug programme.

Doris Taylor: a patient with rheumatoid arthritis

Doris Taylor has active rheumatoid disease. She is 48 years old and has recently developed pain and swelling in her joints. What are the priorities in the management of such patients?

The first essential is to induce remission of her acute symptoms. Reducing the inflammation, rest, and pain relief are the immediate aims: so are avoiding irreversible joint damage and

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maintaining muscle bulk and power. Attention must also be paid to non-articular signs and symptoms, and there must be considerable psychological support.

Rest in the early stages means bed, with back and foot supports and splintage for the wrists and knees where necessary.

Non-steroidal anti-inflammatory drugs will give some relief from pain and reduce some of the inflammation: aspirin is still the treatment of choice, provided the patient can tolerate between 3·5 and 5 g a day. Tinnitus and acidosis may occur when the daily dose exceeds 4 g. A wide variety of non-steroidal anti-inflammatory agents is available as an effective alternative to aspirin.

If after two to three months of taking the simpler non-steroidal anti-inflammatory agents in association with bed rest the inflammatory signs have not subsided, then second-line drugs such as penicillamine, chloroquine, or gold may be used. Their serious adverse effects, of course, make careful monitoring essential. Such monitoring requires close co-operation with the patient but this shouldn't be difficult if the reasons are explained, and the family doctor should be perfectly capable of this kind of supervision when the appropriate facilities are available.

As a general rule systemic steroids are not used in rheumatoid disease, and certainly they should never be prescribed initially by the general practitioner. In many patients rheumatoid arthritis can be brought under adequate control by non-steroidal anti-inflammatory drugs, and for those cases that are not the second-line drugs are almost always adequate when used with the other forms of management.

After the acute inflammation subsides the priorities change. The joints until this time have been rested in their neutral position. Passive physiotherapy has been given to minimise fibrous ankylosis, and active physiotherapy may be started as the inflamed joints begin to settle.

HELP WITH WORK AND HOME LIFE

As the patient improves she will need advice and support for returning to family and work commitments. Aids such as splints may be necessary, or she may even need to change her job.

Many patients return to their normal lifestyle, but for those whose remission is incomplete or who have persisting disabilities the Department of Employment Disablement Resettlement Officer is able to give advice, to find alternative work, and to offer industrial retraining if necessary. The contact should be made by the general practitioner, who will also need to be committed to the continuing assessment of changes in locomotor function and its treatment, whether by physiotherapy, or drugs, or both. In addition, the occupational therapist has an active part to play both at home and at work, and he or she is an invaluable member of the primary care team.

It must not be forgotten that it is rare for patients with rheumatoid arthritis to become severely disabled, but they face serious difficulties in maintaining an independent and safe lifestyle. Everyday tasks that are taken for granted by the healthy adult may become frustrating, tiring, and downright dangerous to the patient with rheumatoid arthritis. A home that seems normal to us may become a maze of hazards for even the partially disabled. But living space can be reorganised, and many aids are now available. The general practitioner should be able to help with these. Examples of changes that can be made include: modifications to taps and electric plugs; a chair with a seat that rises; and aids for fine manipulation—for example, turning knobs on a radio and tea-pot pourers. Occupational therapy departments can provide information on the range of aids that are available locally. Further information may be obtained from: Disabled Living Foundation, 346 Kensington High Street, London W14 8NS (telephone 01-602 2491); RADAR, 25 Mortimer Street, London W1N 8AB (telephone 01-637 5400); Arthritis Care, 41 Eagle St, London WC1R 4AR (telephone 01-405 8572).

SURGERY

What has surgery to offer the patient with rheumatoid arthritis? Much more than is commonly thought. The general practitioner is not expected, of course, to know the details, but he should know what is available for which problem. Techniques range from relatively minor procedures such as the decompression of flexor tendon sheaths to total hip replacement.

Much attention has been drawn to joint replacement in the hands, but the result at present is not always very successful and often hand function can be good even with pronounced deformities. More practical are excision of the subluxated ulna to relieve pain and prevent rupture of the long extensor of the fourth and fifth fingers, or fusion of an unstable destroyed carpus to stabilise the wrist, relieve pain, and improve hand function.

When managing chronic synovitis an alternative to surgical excision of synovium is injection of radioactive yttrium or erbium into the joint, the resulting radionecrosis being as effective as the knife and less traumatic.

Total hip replacement, which depends on the femur being strong enough to take the shaft of the prosthesis, will reverse the painful disability in hips that have been severely damaged by rheumatoid disease, and total knee replacement is slowly overtaking other arthroplasties and arthrodeses as the choice for severe knee damage.

Mary Evans: a patient with osteoarthritis

Much of what has been said about Doris Taylor is just as relevant for Mary Evans, whose osteoarthritis of the hips has produced referred knee pain. Mary Evans's main need, like Brian's, is to understand her disorder and how it is likely to progress. Heberden's and Bouchard's nodes, for example, may be unsightly but do not cause important dysfunction. Osteoarthritis of the first carpometacarpal joint may produce a painful and tender base of the thumb in older women, and a similar problem may arise in the great toe with hallux valgus or hallux rigidus, which will respond well to surgery.

The worst problems of osteoarthritis arise when it affects the knees and hips. The aims, as with rheumatoid disease, are to relieve pain, to give remedial physiotherapy, to help with aids to mobility, and to help the patient to adjust to home and work.

As with rheumatoid disease the relief of the pain of osteoarthritis depends on drugs having anti-inflammatory as well as analgesic action. The pain in osteoarthritis is now thought to be associated with inflammation, and non-steroidal anti-inflammatory agents are the drugs of choice.

Physiotherapy may sometimes be arranged at home, as may the services of an occupational therapist when necessary. The Disablement Resettlement Officer should be consulted early, particularly for people with hip disease who have been employed in heavy work.

When the patient has osteoarthritis of the hip that has reached the stage of painful limitation of movement with flexion contracture and night pain, then total hip replacement should be considered. Knee replacement in osteoarthritis is much less commonly performed, and the results of this operation are not yet as good as those for hip replacement.

Mahmet Kashmi: a patient with septic arthritis

Mahmet Kashmi's tuberculous joint has been left to the last because he presents a different set of problems to the family doctor. What should the general practitioner do when presented with a possible septic monarthritis? The general practitioner's role in dealing with a patient with septic arthritis is purely diagnostic. The differential diagnosis in a previously healthy patient presenting with such a monarthritis must always include septic arthritis, and if this remains a possibility after the first examination then the doctor is obliged to refer the patient for consultant management.

The consultant team will aspirate the joint and may perform a synovial biopsy to determine the type of infection and then start appropriate systemic chemotherapy. They will prescribe bed rest and splintage, and once the condition is under control start physiotherapy. But the general practitioner team still has an important part to play. They can help to determine the source of the infection and organise regular, consistent follow-up . . . and notify the disease to the community physician.

Occasionally monarthritis mimicking septic arthritis arises as a sequel to virus infections such as influenza, rubella, or hepatitis B. When, as in Mahmet Kashmi's case, there is a strong suspicion of tuberculosis the rest of the family must be checked, along with close second-line contacts. This will be organised by the community physician once the disease has been notified.

Tuberculous arthritis is usually treated in hospital with rifampicin, para-aminosalicylic acid, and ethambutol or isoniazid. After the patient is discharged home treatment is continued for between six and 24 months. The general practitioner should be responsible for organising the physiotherapy needed to maintain muscle bulk and the fullest range of joint movement.

These two articles have tried to put forward a comprehensive, reasoned approach to the patient with arthritis of whatever cause. In particular, they have established that the general practitioner is the main decision maker for patients with arthritis. His is the central role, and undertaken in this way it can be a most productive and satisfying one.

We are grateful to Dr Tom Smith and Dr Sally Hull who helped with the preparation of this programme.

Volunteers in General Practice

It does work

A ALLIBONE

In Britain the tradition of volunteers helping to care for people in need goes back through the centuries. Medical care was founded on such help. As voluntary hospitals developed, community support flourished. Community support began to decline only when the National Health Service was started, and this is perhaps attributable to the influence of the two giants of the modern state: the bureaucratic administrator and the trade unionist, though professionalism has also been blamed. In general practice, however, the community has never been active in the same way. There seem to be two reasons for this. Firstly, the general practitioner as an independent contractor saw no possible benefit either for himself or his patients and, furthermore, could clearly expect the disadvantages of changing the accepted doctor/patient relationship. To change this the benefits must be seen to outweigh the disadvantages. Because the Government may be planning to shift care from institutions to the community, such a change in attitude is necessary and can be achieved only if those who live in the community work closely with their doctors, nurses, and social workers.

The general practitioner needs to be assured that volunteers can improve the service he gives, and that it will help him, too. Most communities have a great untapped resource in volunteers with potential skills. For example, in my practice covering 12 villages with a population of about 3000, in seven years we have recruited 242 volunteers who provide a range of services of consistently good quality and reliability. We provide a medical and supportive service for the elderly, but in addition other reliable services are provided by, for example, the Citizen's Advice Bureau, the volunteer bureaus, the probation and school services, and of course the Church and the Samaritans. For the general practitioner, however, it certainly alters the doctor/patient relationship. I do not see how you can expect to call on the help of a patient as a volunteer at one moment and then say, for example, that your appointment system is so booked up that you cannot offer him an appointment for at least four days, or refuse to speak to him when he telephones you on your private number at home. Some patients take advantage of this. None the less serving their fellows seems to bring out in many a consideration for other people and similar worthy qualities. In practice these people either do not presume upon their doctor, or call only in a crisis. There is a price and a reward, and it is up to the doctor to decide where the balance lies.

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Finding the need and the people

The first decision that the doctor must make before starting a scheme using volunteers is what he wants them to do. It is a question of establishing the paramount local need. In my practice there was little difficulty. In 1973 on my list of 2400 patients roughly 30% were over the age of 65 and 12% were aged 75 or over. Furthermore, the services for the elderly were grossly inadequate and in times of financial constraint were unlikely to improve. Clearly, the impending crisis of old age was no longer impending, and I was also irritated at being told that nothing could be done. I decided therefore to use the resources in the community to provide an improved service for the elderly, and this has largely been achieved with volunteer support and help. More than 200 volunteers work from a purpose-built day centre, which is used for a luncheon club twice a week serving 25 lunches each day. This has immeasurably improved the social contact of the isolated elderly people in our villages. Two days a week the centre is used for day care for 15 of my patients and provides many of the services of a geriatric day hospital. Forty-two volunteer nurses provide simple nursing care in the patients' homes supervised by the district nurse. Inevitably, 200 clients and 242 volunteers require administrative backup, which is provided by a small number of

dedicated and active volunteers working with the primary health care team.

How are these leaders found from among our patients? There is good evidence that in each small community there are one or two people who their fellows recognise as having assumed a responsibility for their welfare and also have a legitimate right to do so. In our organisation, for example, they range from a practice nurse who runs the day hospital, to a village postmistress, a farmer's wife, a former general who runs the transport service, to the young wife of a local solicitor, who was a nurse and midwife and runs the volunteer nursing scheme. They are the core of the organisation: their interest is assured because of their experience, and their reward comes in part from being able to work effectively and in part from having a great deal of responsibility.

The quality and reliability of the volunteer service are maintained by delegation and by incorporation. I do not interfere with transport, the luncheon club, or finance, which are essentially lay tasks. I merely ensure that the individuals in charge are responsible to the management committee and both work together as they should. On the other hand, nursing, physiotherapy, and the day hospital are organised by the primary health care team, and my practice nurses and district nurse are responsible for supervising and using their volunteer helpers. Further support comes from a small core of ex-nurses and physiotherapists, who like to practise the profession for which they were trained. In using this approach there has been no difficulty in maintaining standards, but the support and involvement of professional health workers are essential to the success of any medical caring scheme.

Money

Finance has never been a problem, largely because the community and the health and social service authorities approve and support the aims and activities of our volunteer organisation. A priming fund of £200-£300 is necessary. Our expenses in the year ending 31 August 1981 were £4072 and our income £6330. The county council gave a grant of over £1500, £1000 came from a wealthy local private charity, £1000 from interest on capital, and the remainder from legacies, private donations, and local fund-raising: our target is 50p a head per year. Our substantial capital reserve is in part insurance for the future and in part for an extension to our day centre. Our income since 1974 has been over £75 000, including money from joint funding, Age Concern, the Nuffield Provincial Hospitals Trust, and other charities and individuals. Of this, £20 000 was spent on the Glaven Centre, £6000 on a minibus, and about £15 000 on salaries. This included £3500 a year for a voluntary service co-ordinator who worked part-time on an experimental basis for three years.

This brings me to the remaining problem of using volunteers to provide continuing, reliable medical services in association with the primary health care team. The administrative burden is large, and it has to be incorporated into the team. There is now no health professional with the necessary qualities, training, and experience, and no provision to pay for such a person to be trained. I believe that voluntary service co-ordinators have been placed in only four practices—mine, the Milson Road Health Centre in Hammersmith, the Parkwood Health Centre in Kent, and St Budeaux Health Centre in Devon. In all four practices the appointment has been successful, productive, and creative. If care is going to be transferred from institutions to the community resources must be transferred as well, and new health professionals will be needed. Without such help the general practitioner is unlikely to be willing and largely unable to extend his role in the community.

I have given a personal account of how volunteers can be used in primary health care. Unfortunately, if the contributions of patients on family practitioner committees, community health councils, and occasional isolated patient participation groups are excluded then patients in general practice are simply patients with little or no knowledge of the problems of the health service. This may explain some of the public's lack of understanding of our problems as general practitioners and health professionals and may deny the profession the opportunity to develop and control a resource that has the potential to improve the care of our patients.

Volunteers in Primary Health Care, a report of volunteer schemes in Medway Health District, Kent and at Milson Road Health Centre, Hammersmith, is available from the Volunteer Centre, 29 Lower King's Road, Berkhamsted, Herts HP4 2AB for £1·18.

ONE HUNDRED YEARS AGO A memorandum has been drawn up by the Local Government Board, embodying the hygienic principles laid down by various English and foreign authorities as requisite to be observed in the establishment of a cemetery, to prevent it from becoming a source of nuisance and danger to the living. The dangers to public health, to which places of burial may give rise, are of two kinds, viz, the contamination of air by the gaseous and volatile, and of drinking water by the liquid and soluble, products of decomposition. Contamination of air may take place in several modes. The gases evolved from putrefying bodies may make their way to the surface through pores or fissures in the ground, or may pass into open graves dug in their neighbourhood. Or they may diffuse themselves laterally through the ground-air, and be drawn up into the interior of houses. Or noxious emanations may be given off from putrid drainage-water, whether baled out of graves and thrown upon the surface, or draining into open channels or watercourses. Thus nuisance and danger to health may be occasioned, not only to gravediggers and persons attending funerals, but also to the inhabitants of houses in the neighbourhood of the burial-ground. To obviate these risks, it is necessary that the number of decomposing bodies in a given portion of ground should not at any time be so great that the gaseous products cannot be oxidised into harmless substances in the interstices of the soil, or taken up by vegetation; that a sufficient depth of earth intervene between corpses and the surface; and that the soil be of a suitable nature and properly drained, the drainage-water being innocuously disposed of. Furthermore, since the atmospheric contamination which has to be especially guarded against is that of the air in the interior and neighbourhood of human habitations and frequented places, it is necessary that the place of burial should be in an open situation and at a sufficient distance from dwellings, in order that any effluvia arising from it may be diluted by diffusion, or dispersed by the winds, so as not to find their way, in an injurious state of concentration, to places where they will be liable to be inhaled. Foul liquids from graves may enter and pollute a stream or wells in the vicinity of a graveyard, may be injured by percolation from it, and in either case, if the water be used for drinking, injury to health may be occasioned. The liability of wells to pollution obviously depends partly upon their proximity to it, and partly upon the configuration and geological structure of the ground. Thus an intervening impervious bed of clay will prevent foul matters from reaching a well, and filtration through a sufficient distance of porous aerated soil decomposes such matters into harmless inorganic substances, which are fixed by the soil or taken up by plants. It is necessary therefore, in order to obviate risk from this cause, that a cemetery should have a suitable soil and be properly drained; and that it should be at a sufficient distance from subterranean sources of water-supply; and in such a position with respect to them that the percolation of foul matters from one to the other may be impossible. The sanitary requirements for a cemetery indicated under the foregoing remarks may be summed up under four headings:—1 Suitable soil and proper elevation of site; 2 A suitable position, especially with respect to houses and sources of water-supply; 3 Sufficient space; 4 Proper regulation and management. (*British Medical Journal*, 1881.)