Lesson of the Week

Unsuspected fractures of the femoral neck in patients with chronic hip pain due to rheumatoid arthritis

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In patients with rheumatoid arthritis pain and loss of mobility due to diseased hip joints may disguise a superimposed fracture of the neck of the femur, particularly when there is no history of trauma.

Case reports

The table summarises five cases of rheumatoid arthritis in which a fracture of the neck of the femur was initially unsuspected. All five of the patients were postmenopausal women; three had received long term corticosteroids.

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Fractures of the femoral neck in chronic rheumatoid arthritis may be overlooked because of pre-existing hip pain due to rheumatoid disease

All had had chronic hip pain before their fractures. Three did not give a history of trauma (cases 2, 4, and 5), and the patient in case 3, who had had a fall, did not describe any increase in hip pain; the presence of early callus on a pelvic radiograph suggested that the fracture may have preceded her fall.

Discussion

Despite the generalised osteoporosis often found in chronic rheumatoid arthritis¹ the incidence of fractures of the neck of the femur in the disease has been reported as either the same as or only 1.5 times higher than that in the general population.^{2,3} There is, however, a risk of delay in diagnosing fractures in rheumatoid arthritis, particularly stress fractures; these may occur secondary to

Details of five women with chronic seropositive, erosive rheumatoid arthritis and fractured neck of femur

Case No	Age (years)	Duration of disease (years)	Duration of corticosteroid treatment	Mode of presentation	Time from presentation to radiograph of pelvis	Radiographic findings	Management
1	57	28	Past 24 years	Exacerbation of bilateral hip pain after presumed grand mal fit while awaiting surgical cervical fusion as inpatient	Three days	Bilateral subcapital fractures. Rheumatoid changes in both hips	Cervical fusion; bilateral total hip replacement six days later
2	60	19	For eight years from onset of disease	Admitted for treatment of leg ulcer; exacerbation of pain in right groin for three weeks, treated with analgesics by general practitioner. No trauma	Two days after admission; 23 days after presentation to general practitioner	Right subcapital fracture. Old fracture of both pubic rami. Rheumatoid changes in both hips	Right total hip replacement; pinch graft of leg ulcer
3	77	30	Past 29 years	Admitted because of generalised exacerbation of joint pains. Had fallen at home four days previously. No increase in hip pain	One day	Right subcapital fracture with early callus formation. Rheumatoid changes in both hips	Right total hip replacement
4	84	11		Routine outpatient appointment: mild generalised exacerbation of joint pains. No trauma	Same day	Left subcapital fracture. Rheumatoid changes in both hips	Left total hip replacement
5	70	27		Admitted with increased pain in right hip and difficulty walking. No trauma	1st, same day; 2nd, five days later	Old fracture of left pubic ramus. Rheumatoid changes in both hips. Right subcapital fracture	Right total hip replacement

Radiograph of the pelvis showing bilateral displaced subcapital fractures and rheumatoid changes in both hips (case 1).

deformity at the knee or ankle and cause pain that is mistakenly thought to arise from the joint itself.⁴

In cases 1-4 diagnosis was delayed because fractures were not suspected clinically despite a recent increase in hip pain; in cases 3 and 4 the increase in pain was part of a generalised exacerbation of rheumatoid arthritis and the hip fractures were incidental findings

on pelvic radiographs taken to assess progression of joint disease. In case 5 an undisplaced fracture was overlooked on an initial radiograph and detected only on a second radiograph five days later, during which time the patient had been mobilised. Thus any increase in hip pain in rheumatoid arthritis should raise the suspicion of fracture; other causes to consider are septic arthritis, ischaemic necrosis of the femoral head, osteomalacia, and exacerbation of synovitis of the hip.

Total replacement of the hip was performed in each of these five patients because of the risk of a femoral prosthesis alone protruding into the pelvis. All operations were successful, and the chronic hip pain was relieved.

Early recognition of these fractures is essential if unnecessary pain, immobilisation, and deformity are to be avoided.

References

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- 3 Hooyman JR, Melton LJ, Nelson AM, O'Fallon WM, Riggs BL. Fractures after rheumatoid arthritis: a population based study. *Arthritis Rheum* 1984;27:1353-61.
- 4 Young A, Kinsella P, Boland P. Stress fractures of the lower limb in patients with rheumatoid arthritis. *J Bone Joint Surg [Br]* 1981;63:239-43.

(Accepted 6 January 1986)

Medicine and the Media

I FOUND CLIVE Donner's documentary on motor neurone disease, *The Best Kept Secret* (Channel 4, 16 April), to be compelling watching. It began with patients describing how the disease made simple activities of daily living impossible and handicapped them in other ways. All the patients had encountered difficulties in trying to find more information about the disease both from some of their medical advisers and from other sources. One was left with a strong feeling that doctors either don't know much about the disease or are not willing to talk to their patients about it.

Professor David Marsden gave a lucid and simple description of the areas of the nervous system affected by the disease and later discussed our lack of progress towards understanding its aetiology or developing treatment. Jan Way, the patient services officer of the Motor Neurone Disease Association, was very good. She described the best ways to maintain the patients' quality of life using aids.

Several messages came through strongly from the patients, who were slightly younger than an average group with motor neurone disease. Most had appreciable dysarthria, but even the most dysarthric and physically handicapped were intellectually preserved. The sense of helplessness, frustration, anger, and bitterness that many such patients and their relatives experience was clearly evident. One striking feature, however, was that the patients seemed generally to have come to terms with these emotions and to have harnessed them for their own benefit; but their close relatives were much more disturbed. The inexorably progressive nature of this disease was poignantly illustrated when it became clear that most of the sufferers who had talked in the early part of the programme had died within a year of their interviews and before this broadcast.

Some opportunities to communicate facts about the disease were not taken. It should have been emphasised more that, although we don't know what causes motor neurone disease, it is *not* contagious, or except in extremely rare cases inherited and that pain is not a primary symptom.

We doctors must talk more openly to our patients about motor neurone disease. We should also remember that in rapidly pro-

gressive conditions like motor neurone disease it is no good taking eight months to provide aids or modify the patient's home to try to improve their quality of life—they may by then be too disabled to benefit.

This programme helped to make motor neurone disease a less well kept secret to the lay public. Let us all hope that with time and increasing knowledge the "secret" of the aetiology of the disease will also be discovered and that this will lead to an effective treatment. —TIMOTHY WALLS, research associate in neurology, Newcastle upon Tyne.

WHEN SALVADOR DALI and Luis Buñuel made their experimental film *Un Chien Andalou* in 1931, the opening bizarre sequence showed a young woman apparently leaning back in a chair and having her left eyeball sliced open with a cut throat razor: the effect, said the enfants terribles of surrealism, would "shock the onlooker into a state of free association" and would enable him the better to appreciate the weird scenes that followed. I was reminded of this technique by the first few moments of the videotape *Prescribing for the Elderly* (Envision Productions, Kemicon Ltd, Marsh Chambers, 27 Marsh Parade, Newcastle, Staffs, £46 inclusive), which show elderly people being put through their paces by energetic nurses and physiotherapists. Jolly music will enliven any viewer who might welcome the prospect of yet another therapeutic exhortation with less than a glad cry, and the hospital scenes do indeed concentrate the attention. (I did not free associate once, as far as I could tell.)

The tape aims at teaching pharmacology and therapeutics and uses a script written and spoken by Dr John Mucklow, a consultant in geriatric medicine. It is hard to be certain what audience it is intended for, but most doctors dealing with elderly patients could probably get something out of it. The amount of information imparted is rightly not large and is competently presented.

I had trouble with some of the graphics, however, which consisted largely of moving diagrams showing drug molecules