LEADER
Aluminium and dialysis arthropathy
Although dialysis has enormously improved the lot of patients with chronic renal failure, nevertheless it is not without complications. The aluminium content of the dialysis fluid has had to be lowered because it caused encephalopathies and proved to be a bone toxin. In patients receiving long term care a dialysis related arthropathy may also occur, and the reasons underlying the toxicity of this metal are explored.

SCIENTIFIC PAPERS
Collagen antibodies, HLA, and rheumatoid arthritis (RA)
In previous studies the levels of antibodies to denatured collagen have been found to be higher in those patients with RA who are HLA-DR4 positive than in those who are not. Further investigation has shown this to be a relationship with the phenotype A2+ DR4+ and several B locus antigens, suggesting that this association is with a gene other than DR4. This in turn implies another gene that is active in RA.

Gold induced complications and HLA-DR3
Although gold treatment has stood the test of time in RA, it has proved to be toxic, and this seems to be associated with the presence of HLA-DR3, particularly with the extended haplotype B8,DR3. This carries both the DQA2.1 and DQB2.1 genes.

Sulphasalazine in RA and inflammatory bowel disease
The use of sulphasalazine in RA has shown it to be effective but associated with a higher incidence of side effects than that seen when used in inflammatory bowel disease. This seems to be associated with a higher plasma sulphapyridine and lower plasma sulphasalazine concentration in RA due to a difference in the way it is metabolised and absorbed.

Pulse methotrexate, RA, and liver histology
The development of liver complications in methotrexate treatment in RA has been thought to be less than when it is used in psoriasis. In this study the authors suggest that the assessment of liver changes is not predicted by liver function tests and it is not clear whether a liver biopsy needs to be carried out in those who have received less than 1500 mg. Although nearly one third of those studied had liver fibrosis, it remained mild.

Cytidine deaminase in synovial fluid in RA
Cytidine deaminase, released from granulocytes, reflects their activity in RA. Lactoferrin closely mimics this, but clearly other factors are important too. Joint acidosis may be one of them, but proteoglycan concentration shows no association so presumably cartilage degradation is not a factor.

Capsaicin, synoviocytes, and RA
Capsaicin increases the synthesis of collagenase and at certain concentrations causes synoviocyte proliferation and prostaglandin production. The means by which it stimulates DNA synthesis and produces these effects is not clear, but it is not apparently mediated by tachykinins.

Cyclosporin and psoriatic arthritis
An open study of this drug in psoriatic arthropathy over a six month trial showed that it was effective in most but at the price of a substantial rise in serum creatinine in some patients and increase of the diastolic blood pressure. Interaction with non-steroidal anti-inflammatory drugs may be important but it is certainly worthy of further study.

Antigen induced arthritis in beige mice
Beige mice were used as a model for antigen induced arthritis in this investigation. Mice with the beige mutation are known to be deficient in leucocyte elastase and cathepsin G. They showed a surprisingly more severe arthritis than controls and perhaps this is due to a greater retention of the antigen. The leucocyte elastase and cathepsin G deficiencies did not seem to contribute.

Cholesterol-rich liposomes in adjuvant arthritis
Cholesterol-rich liposomes injected into rats with adjuvant arthritis accumulate like cholesterol-poor ones in the paws. Uptake into the inflamed tissue was always higher than into normal tissue and this depended on the size of the liposome; the smaller apparently the better. This may have important therapeutic implications if anti-inflammatory drugs can be attached to such liposomes.

Chemotaxis, chemiluminescence, synovial fluid polymorphonuclear leucocytes, and reactive arthritis
Both chemotactic and chemokinetic migration and chemiluminescence of synovial polymorphonuclear leucocytes were significantly reduced in acute reactive arthritis. This suggests that the cells were deactivated for chemotaxis and the production of oxygen derived free radicals, but subgroups may become hyperreactive with an increased inflammatory response. Presumably the microbial antigens modify the polymorphonuclear leucocyte function.

The middle ear and juvenile chronic arthritis
Middle ear function, either unilaterally or bilaterally, was affected in over half the patients studied, probably owing to inflammation of the ossicle joints and subsequent stiffening of the tympanic membrane and ossicular chain. This is not severe enough to cause hearing loss in affected children, however.

Bone mineral density in patients with systemic lupus erythematosus treated with corticosteroids
When corticosteroids are used in patients with systemic lupus erythematosus (SLE), particularly if this is over a long period of time, naturally there is a worry that these patients may develop premature osteoporosis. This study failed to show this, however, but it may be because the numbers studied were too small. As so often is the case, further study is needed.

SLE, myocarditis, conduction defects, and anti-Ro antibodies
Anti-Ro antibodies in adults with SLE have been associated with several subtypes. They may be seen with myocardial involvement, and this study adds further evidence towards this conclusion. Both myocarditis and various types of conduction defect seem to be associated with the presence of these antibodies.
Herpes zoster in SLE  p 630
Herpes zoster virus infection is often seen in immunocompromised patients so it is perhaps not surprising to see it in nearly half of patients with SLE. It appeared to be benign fortunately but often seemed to be reactivated in this disease.

CASE REPORTS

Meningococcal arthritis and the adult respiratory distress syndrome  p 634
Although meningococcal infection in a joint is seen not uncommonly as a secondary phenomenon, it is very rare as a primary event. Such an event is described here in a fit young man who developed it in the knee. Shortly afterwards he developed the adult respiratory distress syndrome, presumably because of a sudden bacteraemia.

Selective IgA deficiency and spondyloarthropathy  p 636
Selective IgA deficiency is the commonest immunoglobulin defect, but its association with ankylosing spondylitis has rarely been reported. A white woman with this abnormality developed severe ankylosing spondylitis and peripheral joint involvement, which proved difficult to treat. This is in contrast with the progress of the disease in SLE and chronic juvenile arthritis when seen with this deficiency.

Ankylosing spondylitis, IgA, and renal and skin involvement  p 638
Two patients are described with inflammatory bowel disease, one of whom had ankylosing spondylitis also. Both developed a leucocytoclastic vasculitis and one glomerulonephritis, and IgA immune complexes were seen in each patient. This is an unusual combination of events: Does it constitute a new disease entity?

Bone pain in secondary syphilis  p 641
In this young fireman periostitis with consequent bone pain was the only feature of secondary syphilis at presentation. This is unusual, and ordinary radiographs were of no help. Bone scintigraphy was, however, and the authors emphasise how useful this investigation may be in detecting early periostitis.

Pastulotic arthro-osteitis and erosive polyarthritis  p 643
The combination of an inflammatory osteitis of the sternocostoclavicular region and palmpoplantar pustulosis constitutes this syndrome, which is rare in the United Kingdom, though more frequently seen in Japan. The woman described here had, unusually, an erosive arthritis and disease of the left fibula. This syndrome has previously been classified as a seronegative spondyloarthritis, but the authors cast doubt on the correctness of this.

Hodgkin's disease in Sjogren's syndrome  p 646
Lymphoma and pseudolymphoma have been described as unusual complications of both primary and secondary Sjoergen's syndrome, and an example is described here of Hodgkin's disease associated with the primary form. The authors put this forward as a matter of fact, but the reason for the association is far from obvious. Is it due to a chronic state of immunological hyperactivity?

NOW AND THEN

Palindromic rheumatism  p 648
When a disease affects a medical man we sometimes get some intriguing insights into the problem. They may not solve it but perhaps make us think again about it all. Here the unsolved conundrum of palindromic rheumatism is described together with the apparent fact that one periarticular nodule acts as a herald each time of an impending episode in this patient. What, if anything, does this mean?

REVIEW

Neurogenic influences in arthritis  p 649
We all recognise pain as one of the most important symptoms of arthritis, but it is not always present and we are not too clear how it happens. How is pain mediated? What are the anatomical and physiological mechanisms involved in its appreciation? This is an under-researched phenomenon but this lengthy review tries to give some perspective to it all. Perhaps we can moderate pain more effectively if we can synthesise compounds that specifically block substance P: the prospect of being able to do this effectively might give us a new therapeutic horizon.

LETTERS TO THE EDITOR

653  Haematogenous clavicular osteomyelitis caused by Bacteroides fragilis Alex E Studemeister, Bruce J Dreyfuss

653  Effect of capsaicin on the release of substance P from rheumatoid arthritis and osteoarthritis synoviocytes in vitro G Parisch, M Matucci-Cerinic

653  Infectious arthritis caused by Propionibacterium acnes: a new case Ph Bertin, R Trees, M Arnaud, A Traore, R Desproges Gottenor