Journal summary

LEADER

Articular tissue grafts p 292
When articular cartilage is damaged we can repair it if the damage is late by replacement prostheses, but what to do when it is early? At present this is virtually untenable, but the use of osteochondral allografts looks promising, though we have to be careful of the problem of transmissible viruses.

SCIENTIFIC PAPERS

Food intolerance in rheumatoid arthritis (RA) p 298
Two papers from The Netherlands look at the vexed question of food intolerance in rheumatoid arthritis. Many patients are convinced that some foods may influence the progress of their disease adversely and we would do well to listen to them. In the first paper there is evidence that a subgroup exists in whom dietary manipulation may be of benefit and the second paper looks in more detail at patients who showed a marked improvement on a hypoallergenic, artificial diet. The conclusion of the authors is that an underlying immunoallergic mechanism is operating in at least some patients.

RA, leucocyte integrin, and CR1 expression on peripheral leucocytes p 307
Infiltration of mononuclear cells into the synovium and synovial fluid is a characteristic of RA, and several mechanisms have been described which might induce the cells to enter the joint. The functional importance of the altered expression of the antigens on lymphocytes is unknown, however, though this alteration is consistent with activation within the circulation.

Substance P and synovial tissue in RA p 313
The nervous system clearly plays a part in the pathogenesis of joint disease: for instance, strokes are protective against RA. Neuropeptides such as substance P are contained in unmyelinated nerve fibres and can be released into joints. This paper shows that specific binding sites for substance P are localised on human synovial endothelial cells.

Poor sulphoxidation, RA, and second line treatment p 318
Only a minority of normal subjects have impaired ability to oxidise sulphur, but this study shows that three quarters of patients with RA have this defect. It is associated with an increased risk of side effects when sulphur containing drugs are given. This phenomenon does not seem to be related to the drugs themselves nor to an abnormal acute phase, so what does it mean?

α-Penicillamine and scavenging of H2O2 and HOCl p 321
Neutrophils within inflamed joints in RA are activated to secrete reactive oxidants and myeloperoxidase. Although the mode of action of penicillamine is obscure, it may work by scavenging H2O2 and, more importantly, HOCl. It is suggested that in vivo the preferential scavenging of the HOCl may be the important action where secreted myeloperoxidase is functional.

Pre-existing mucocutaneous disease, gold, and RA p 326
It is a worry that patients with dermatological problems who then go on to develop RA may not be suitable for gold treatment. This study from Sweden is reassuring that this is happily not so.

Vertebral squaring in ankylosing spondylitis (AS): a new radiological method p 330
Vertebral squaring is well known to be present in many patients with AS, but its definition tends to be dependent upon the clinical impression of the doctor. The method described here is simple and rapid and has better inter- and intraobserver agreement than the subjective method.

63 Kilodalton insect protein antibody and AS p 334
An insect protein of 63 kilodaltons was recognised by nearly half of patients with AS, a few with other inflammatory arthritides, and 4% of normal subjects. So what? Well, it shows that even though this protein was not associated with disease activity, there are specific antibody responses in AS and this may shed further light on the genesis of autoimmunity.

AS and increasing age of presentation p 340
Examination of the age of first presentation of patients with AS between 1952 and 1983 shows that this age is increasing, though with the improvement of rheumatological services that have taken place we might suspect the opposite. Why this is so is not clear.

Pain and juvenile RA p 343
Evaluation of the relationship between pain and inflammation of the joint in juvenile RA shows that a significant correlation of the intensity of pain and joint temperature is only seen in the very young. The degree of joint inflammation is only one factor of several contributing to pain in older children.

Intravascular coagulation and recurrent relapses in juvenile RA p 347
Intravascular coagulation is a rare complication of the systemic form of juvenile RA. A patient is described here who had two relapses of her disease accompanied by disseminated intravascular coagulation and on both occasions she had liver and renal damage which was not associated with the use of non-steroidal anti-inflammatory drugs. There was a possible role for tumour necrosis factor.

Juvenile RA and antiperinuclear factor p 350
It may be difficult to make a serological diagnosis of juvenile RA because the rheumatoid factor is often not positive. The antiperinuclear factor proved to be very useful for diagnosis and although it is less sensitive than the hidden rheumatoid factor assay, it is easier to do.

Fluctuations of lupus anticoagulant activity in systemic lupus erythematosus (SLE) p 353
Lupus anticoagulant and the related anticardiolipin antibody are associated with the antiphospholipid syndrome and we need to know how and when they fluctuate. Not all patients with this syndrome have SLE but if they do then lupus anticoagulant activity is more constant than anticardiolipin antibodies, though even then it may vary. It is not good enough therefore to rely on only one sample.
Jaccoud’s arthropathy and SLE

Jaccoud’s arthropathy is a chronic deforming synovitis seen in one form of SLE. In this group serum C reactive protein is higher than in other forms, the disease is of longer duration, and there is a longer history of arthritis. The increase in C reactive protein may indicate persistent inflammatory reaction.

Transforming growth factor β (TGF β), the lung, and autoimmune disease

Chronic pulmonary fibrosis may occur in many autoimmune diseases but there is little known about the mechanism. Increased transcription of the TGF β gene occurs in the bronchoalveolar cells, however, suggesting that TGF β may be produced by them and be involved in autoimmune related changes of the pathophysiology of cytokine networks when the lung is so affected.

Age and arthritis

Rheumatic diseases are a major cause of disability in the population so we need to know about their age distribution in detail in order to plan health facilities to cope with them. Not only do they have a high prevalence but their prevalence also increases dramatically with age. Sadly, however, there is no concomitant increase in the reporting of these diseases to a specialist.

Psoriatic arthritis and sternoclavicular joint disease

The sternoclavicular joint is often affected in psoriatic arthritis but not much has been published about how to examine it radiologically. Computed tomography seems to be the best way.

Urate clearance and genetic control

Hyperuricaemia clusters within families and shared genes together with shared environment (such as diet) have been implicated. A study of the renal clearance of urate in twins suggested that genetic factors exert an important control on this, and may determine some of the familiarity of hyperuricaemia and gout.

Childhood dermatomyositis and staphylococcal infections

Staphylococcal infection occurs commonly in childhood dermatomyositis and children so infected are very likely to develop calcinosis. They tend also to have depressed granulocyte chemotaxis and higher serum IgE than controls. This suggests that they have immunological differences which may or may not be related to the infection.

Microalbuminurin in systemic sclerosis

The presence of significant microalbuminuria usually indicates that renal disease is likely to be present and this worsens the prognosis. It is commoner in systemic sclerosis than in primary Raynaud’s phenomenon or unrelated skin disorders but whether it alters the prognosis in this disease is not yet clear.

Damage to the endothelium in Sjögren’s syndrome

Sjögren’s syndrome is an autoimmune exocrinopathy which may present in many ways. Measurement of von Willebrand factor as an indicator of damage to the endothelium and various tissue antinuclear antibodies showed no intercorrelations. This suggests that although these may be useful for confirming the diagnosis, nevertheless they are not useful for forecasting the course of the disease.

Analgesic effect of indomethacin

Does indomethacin exert its analgesic effect by acting on the central nervous system? A study using the nociceptive flexion reflex showed that it decreases the amplitude of this reflex considerably compared with controls. This suggests that it does indeed work in this way.

CASE REPORTS

Abdominal pain and rheumatic fever

Rheumatic fever is becoming commoner so it behoves us to be more aware of it. Abdominal pain is an uncommon form of presentation so it is as well to publish this case report as a reminder. It occurred here in a young girl who also had free peritoneal fluid.

SLE and thrombotic thrombocytopenic purpura

Thrombotic thrombocytopenic purpura is rare, and more rarely still it may occur in association with SLE. The time gap between the two in this patient was nine years, which is rarer still. The patient described did not have any anticardiolipin antibodies, but renal biopsy did show that she had a diffuse proliferative glomerulonephritis. She improved with corticosteroid treatment.

Pregnancy, the antiphospholipid syndrome, and plasmapheresis

A woman with SLE and the anticardiolipin syndrome had had three previous abortions. On this occasion treatment was started with immunoadsorbent plasmapheresis to remove the antibodies, combined with low dose aspirin and corticosteroids. To what must have been the delight of everybody she was successfully delivered of a baby girl.

RA and infectious arthritis

Infectious disease of the joints is unfortunately common in RA and it is always serious and may indeed be fatal. Although Staphylococcus aureus is the usual organism involved Mycobacterium tuberculosis may be an offender also. It is usually more difficult to make the diagnosis and therefore it may take longer. A warning—infection of the joints may be multiple.

Brucellosis and avascular necrosis

Brucellosis is common among the Bedouin in the Negev and infection with it may vary from the very mild to very severe. Arthritis is common with it. A young Bedouin girl developed osteomyelitis with such an infection and despite appropriate antibiotic treatment went on to get avascular necrosis of the hip. Fortunately, this is rare.

Rubella associated arthritis and its follow up

Rubella is well known to be associated with arthritis, particularly in women. It is usually acute, but it may become chronic. An example of chronic disease is reported here in a woman who was seen over a period of seven years. She had a defective humoral immune response to the rubella virus.

Rat bite fever but no apparent bite

A pig farmer presented with an acute arthritis thought to be septic, but the responsible organism was difficult to grow. It was eventually identified as Streptobacillus moniliformis, although to make identification even more difficult he could not recollect any bite. He did well, nevertheless.

Aortic valve cusp rupture and relapsing polychondritis

Aortic regurgitation in this rare disease usually occurs late but in the woman reported here it was early and associated with a ruptured valve cusp and a normal aortic root.
**Pachydermoperiostosis, abnormal bone, and arthritis**

Pachydermoperiostosis (primary hypertrophic osteoarthropathy) is an inherited disease characterised by digital clubbing, periostosis, and pachydermia. Arthritis may also occur. Severe joint pain was the reason for presentation here and it proved to be very difficult to treat.

**DISPATCH**

From the Pacific Basin

Peter Brooks was suffering with rough weather when he wrote this. Community based research and epidemiology are much in evidence in the area, which should help to produce some answers to the problem of providing adequate rheumatological help for a patient as cheaply as possible—a difficulty everywhere these days. Rheumatology is active, lively, and making its presence felt throughout the region, however.

**NOW AND THEN**

Penicillamine and the rheumatoid factor

Penicillamine has long asserted its place in the treatment of RA so it is as well to remind ourselves of its early history—which was not so long ago. Dr I A Jaffe had the honour of being accredited with the first publication about the effect of treatment of RA with penicillamine in 1983, but Dr Ziff and his colleagues tried to publish this information in 1960: it fell to this journal to turn them down! I hope we do not make that sort of mistake too often, though I would not put money on it, such are the perils of medical publishing.

**REVIEW**

Slow acting antirheumatic drugs and RA

Although we have several drugs which we fondly hope are disease modifying, we do not really know yet how they work and our use of them smacks too much of empiricism. As the authors of this review point out, until the molecular basis for their use is known we are fighting in the dark.

As I am now retiring this is the last journal summary that I shall be writing. I wish my successor Dr Michael Doherty every success and long may this journal continue to serve rheumatology.