Journal summary

LEADER

Hepatitis and non-steroidal anti-inflammatory drugs p 489
We have long become used to the effects of non-steroidal anti-inflammatory drugs (NSAIDs) on the gut, but this leader comes as a reminder to us that it is not only upon the gastrointestinal tract that the effects exert their action. It is on the liver too that NSAIDs (including aspirin) may exert an adverse action. Fortunately this is usually reversible and mild, though in the case of ibuprofen it proved not to be so. Though rare, nevertheless this effect is important.

SCIENTIFIC PAPERS

HLA-DR antigens and HLA-DQ β chain polymorphism in susceptibility to RA p 494
It has now long been established that the HLA-DR4 antigen is associated with susceptibility to RA, though we are not so clear about the association with various subtypes. This study again confirmed the association between HLA-DR4 and RA with a less clear association with DR-1. Although no obvious allelic form of HLA-DR4 restriction fragment length polymorphism was noted, there was nevertheless a decrease in a characteristic allele in patients with RA. This suggests that although RA susceptibility lies predominantly with the HLA-DR genes, HLA-DQ genes may have a protective role.

Monocyte activation in early onset rheumatoid arthritis p 497
This report from Japan suggests that monocytes are activated both during the acute and the chronic phases of RA. They produced spontaneously greater amounts of certain prostaglandins and leucotrienes than controls when they were stimulated by lipopolysaccharide. The authors conclude that these cells produce large amounts of mediators, which may play a part in the inflammatory process.

Production of prostaglandin E2 induced by histamine by cloned rheumatoid synovial cells p 504
Again from Japan a study of cloned rheumatoid synovial cells was undertaken, which showed a different response to stimulation by histamine depending on whether the cells were macrophage-like, dendritic, or like fibroblasts. They all produced prostaglandin E2, but the response was greatest with the macrophage-like cells, least with the fibroblast-like cells. This suggests that they may have a role on bone in RA joints.

Analysis of impaired in vitro immunoglobulin synthesis in rheumatoid arthritis p 507
In RA decreased immunoglobulin synthesis in lymphocyte cultures stimulated by pokeweed mitogen has been shown, and it is interesting to see the various roles of B and T cells and monocytes in this. In RA immunoglobulin production already seems to be decreased at the beginning of the disease in mononuclear cells and this became worse as the disease progressed. Conversely, B cells did not show this response but there was poor helper function, and the primary defect in immunoglobulin synthesis seems to lie in impaired production of interleukin-2 together possibly with other mediators.

Interferon gamma and cultured synovial cells in RA p 512
Interferon gamma has antiproliferative, immunomodulatory, and antiviral properties so its effect on the in vitro growth of synovial fibroblast-like cells in RA was examined in this study. Its effect was inhibitory as might be supposed in a manner dependent on dose, having an action on both synovial cell proliferation and interleukin-1 induced release of prostaglandins and collagenase. This throws some light on the pathogenesis of RA.

Plasma renin in rheumatoid vasculitis p 517
Plasma renin rises when the renin-angiotensin system is activated, and this Dutch study showed that both renin and prorenin are a little raised when rheumatoid vasculitis is present. This might indicate that cardiac and renal disease occurs when vasculitis is seen as opposed to that seen in controls and in diabetes mellitus. This does need confirmation but it is nevertheless a possible pointer.

Polymyalgia rheumatica (PMR) and seasonal variation p 521
Seasonal patterns of the onset of PMR have long been suspected and indeed have been well described in both summer and winter. The search for a triggering agent stimulated by this observation has so far drawn a blank. Investigation in Italy showed that there was indeed clustering, particularly from May to August, though this trend was not seen in elderly patients with RA. Is increased sunlight the agent that starts this off? The search goes on.

Systemic lupus erythematosus (SLE) and IgG, IgA, and IgM isotypes p 524
Is there a correlation between the clinical features of SLE and circulating antihistone antibodies of the IgG, IgA, and IgM isotypes? This study attempts to find one using an enzyme linked immunosorbent assay (ELISA) on serial blood samples. Although there was wide variation between patients, a definite correlation was observed in each subject. The correlation between IgG and IgA in the antihistone antibodies and disease activity was complex but real.

Hereditary chondrocalcinosis p 528
The factors responsible for the deposition of calcium pyrophosphate dihydrate crystals in the joint cartilage are unknown, though a genetic factor seems to operate at least in some people. Most studies have suggested that the mode of inheritance is autosomal dominant. This family study reported for the first time in Ashkenazi Jews showed that the disease started early and proved to be chronic with exacerbations often induced by exercise. Again the inheritance pattern is a dominant one.

Chondrocalcinosis in Spain p 531
A study of first degree relatives of patients with known chondrocalcinosis from Spain showed that a quarter had familial disease with two distinct patterns. Clinical and radiological differences were seen between late onset and sporadic forms, and the authors feel that the true prevalence of familial disease is underestimated. There is probably a dominant autosomal transmission with variable penetrance, and they suggest that homozygous patients with familial chondrocalcinosis may present a more severe form of the disease.
Cyclic loading and articular cartilage nutrition  p 536
Everyone knows that articular cartilage is avascular and that nutrients are transported to the cells by diffusion from the synovial fluid. Cyclic loading of the cartilage may help this and clearly this is worthy of further study. Small solutes such as urea do not seem to be affected, but large ones like albumin may be aided by this process. This has an implication—lack of movement might cause inadequate nutrition.

Rabbit knee blood vessels and acute joint inflammation  p 540
The effect of injecting kaolin into a rabbit’s knee was to cause inflammation about four hours later. If the nerve supply to the knee was stimulated before injection the result was to cause vasoconstriction first followed by dilatation as soon as the electrical stimulation was stopped. The vasoconstrictor response became progressively greater with a consequent reduction in blood flow. The sensitivity of α adrenoceptors showed an even greater response when injected with kaolin compared with controls. What this means is not as yet quite clear but significant alterations undoubtedly occurred in factors which influence articular blood vessel calibre.

CASE REPORTS

Delayed splenic rupture in RA  p 545
When patients with RA fall down, as they occasionally do, because of their disability they may adopt the ‘fetal tuck’ position so that they can protect their hands. This may cause an injury to the spleen from the left elbow and is precisely what is reported here, but unfortunately this lesion may not be immediately obvious. In this patient, fortunately, it was recognised in time, and the outcome was successful.

Adult onset Still’s disease and diabetes mellitus  p 547
An upper respiratory tract infection occurred in a young man, who then within a fortnight developed Still’s disease and insulin dependent diabetes mellitus. It was then found that he had a sustained increase of antibodies to the rubella virus. Presumably this was all due to a single cause and possibly precipitated by the rubella infection. Or was it?

Cardiac tamponade in juvenile chronic arthritis  p 549
Cardiac tamponade is unusual in juvenile chronic arthritis, though pericarditis was described by Still. Two examples of this complication are reported here, sadly with fatal results despite active intervention. The authors believe that the use of corticosteroids may modify the progression of this complication, but experience with adults suggests that early surgical interference may be more effective.

Spontaneous haemarthrosis of the knee  p 554
Spontaneous haemarthrosis is described here in association with a synovial and juxta-articular haemangioblastoma of the knee. The reason for the spontaneous haemarthroses was not clear at first despite several arthroscopic examinations, but the malformation was eventually found and removed and the cure was apparently complete.

Axillary vein thrombosis in adolescent systemic sclerosis  p 557
A rare complication in a rare disease occurring at an unusual age requires reporting if only to alert rheumatologists to the possibility. The girl concerned had abnormal clotting factors which perhaps explain this development, but is this part of the disease perhaps or not? Further examples if known might perhaps elucidate this.

DISPATCH

From the Pacific Basin  p 560
The publication in this issue of the Annals of several reports from Japan emphasises—if it needs emphasising—the importance of the Pacific Basin to the world. In Europe and to a lesser extent the United States we tend not to pay as much attention to this part of the world as it deserves and yet much that is important in rheumatology occurs here. Peter Brooks in his interesting and informative article tells us much of this. We ignore this at our peril.

REVIEW

The disabled living centre  p 563
The disabled form a sizable minority of the population, but disabled living centres are still few and far between. What are they, what do they do, and what use are they? Professor Anne Chamberlain sets out to answer these questions in her important review. The provision of this resource is perhaps less glamorous than the development of a new research centre or the reporting of a new development in treatment, but these centres are of particular significance to the patient on the ground.

LETTERS TO THE EDITOR

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