Journal summary

LEADER

Evolution in the antiphospholipid syndrome p 147
Since the original description of this syndrome it has been refined and several other manifestations related to it have been particularised. Hepatic, adrenal, pulmonary, cerebral, neuropsychiatric, and cardiac associations as well as others are now recognised and the syndrome clearly is still being evaluated. Our leader this month looks at its present protean status and this may well be amended again in the near future.

SCIENTIFIC PAPERS

Systemic lupus erythematosus (SLE), lipids, anticardiolipin antibodies, and vascular disease p 152
Vascular disease is increased in SLE and it has been suggested that this is associated with an increase in anticardiolipin antibodies. Hyperlipidaemia is known to be a risk factor for vascular complications in this disease and it is reasonable to suggest that if the two occur together the risk is increased. This study indicates that this is indeed so; continued high doses of corticosteroids increase the development of an atherogenic profile and contribute, therefore, to the risk.

Cardiac disease in SLE p 156
An examination of patients with this affliction by echocardiography showed that over half had a cardiac abnormality. Mitral valve disease was the commonest, but over a quarter had a pericardial effusion and a fifth had myocardial involvement. All this tended to be clinically silent so, clearly, this investigation is important in order to be able to recognise its presence.

Reassessing the antiphospholipid syndrome in SLE p 160
Anticardiolipin antibodies are common in SLE and this paper confirms the known association of their presence and the likely development of thrombosis, abortions, and thrombocytopenia. The mechanism of action of these antibodies is still unclear, however.

Glomerular mesangial cells and antibodies to double stranded DNA in SLE p 162
The glomeruli show severe changes in active proliferative lupus nephritis and the titres of autoantibodies to double stranded DNA seem to be closely related to the level of the renal inflammation. The results of this study suggest that the nephrotropic antibodies to double stranded DNA can directly damage the glomerular mesangial cells as well as form potentially damaging immune complexes with DNA.

Interleukin 2 receptors and light chain immunoglobulins in lupus nephritis p 168
The same authors from Taiwan looked at the excretion of soluble interleukin 2 receptors and free light chain immunoglobulins in the urine of patients with active lupus nephritis. Cytokines and other inflammatory mediators are likely to be secreted by infiltrating mononuclear and mesangial cells in the glomeruli, leading to tissue necrosis. The authors conclude that the severity of inflammation of the kidneys can be reflected by the increased excretion of interleukin 2 receptors and free light chain immunoglobulins.

Coexistent rheumatoid arthritis (RA) and SLE p 173
We regard RA and SLE as two different diseases but they may coexist nevertheless. Examination of the clinical and serological features and the HLA phenotypes of such patients suggests that those with both diseases have the genetic determinants of both.

Validity in measuring disease activity in RA p 177
We can measure disease activity in RA in many ways, but there is little agreement as to which is the best way, nor has there been much attempt to assess the validity of these activity variables. Most single variables proved to be poor guides and the best of them was the number of swollen joints. A composite index, the Mallya index, seemed to be the best guide to disease activity.

RA and inherited factors p 182
A combination of inherited and environmental factors is likely to cause RA, but how much is attributable to either? Examination of over 200 sibships of the same sex in which the proband had classical or definite

RA in order to evaluate the genetic component suggested that sex and HLA type accounted for some two thirds of the inherited risk of developing the disease.

Prevalence of chronic arthritis in the Scottish Highlands p 186
Chronic arthritis forms a considerable burden owing to its effect on the community and the need for adequate health care provision. The incidence and prevalence of the various diseases may vary from area to area so it is important to establish hard data to this effect to facilitate realistic planning. This report from the Highlands of Scotland can only be valuable in this regard.

Satisfaction with care in a rheumatoid clinic p 195
Patients are much less likely these days to be uncomplaining about perceived or real deficiencies in the standard of care that they receive, and a good thing too. Investigation of the degree of satisfaction that they had in one rheumatoid clinic reassuringly showed that in general they were well satisfied, but they felt that some aspects left something to be desired—for instance, the time spent in the waiting area before consultation was too long.

Interleukin 6 synthesis by synoviocytes in arthritis p 198
We know that interleukin 6 is a potent cytokine with many activities, which means that it should be considered as a likely contributor to RA, and so we need to know the ability of synoviocytes to synthesise it. Certainly, synoviocytes seem able to synthesise interleukin 6 and this seems to be a secondary phenomenon that may contribute to the pathogenesis of joint inflammation.

Dichloromethylene biphosphonate (clodronate) and the phagocytosis of hydroxyapatite particles p 203
Does the presence of clodronate influence the phagocytosis of hydroxyapatite particles by macrophages *in vivo*? This study from Finland set out to study this using rat peritoneal macrophages. Clodronate seemed to have an inhibitory effect on the phagocytic activity and apparently modified the inflammatory cell response.

Complexed IgE and its arthritogenic potential p 210
With the rat knee joint as a model, IgE aggregates were injected and the effect assessed. Complexed IgE appears to have an arthritogenic potential and particularly seems to work through activation of mast cells. In humans immune complexes containing IgE can be found in the joint, and synovial mast cells are numerous, so an inflammatory amplification loop in the pathophysiology of RA may be set up.

Cartilage proteoglycans release by methylprednisolone p 214
High performance liquid chromatography was shown to be useful for the analysis of cartilage turnover and destruction both in health and disease. Using this method the authors were able to show that proteoglycan in synovial fluid is unable to interact with hyaluronate to form cartilage type aggregates. Intra-articular injection of corticosteroid caused proteolytic degradation and release into the synovial fluid of hyaluronate digested proteoglycans.

Metabolism of 25-hydroxylated vitamin D₃ by synovial fluid macrophages in arthritis p 220
25-Hydroxylated vitamin D₃ may have an immunological role in joint disease and is known to inhibit collagen synthesis by osteoblasts and to promote bone resorption. It may have complex immunoregulatory functions which affect joint disease so it is important to understand control of its synthesis. This paper endeavours to throw some light on this problem.

Ankylosing spondylitis and the heart p 227
Electrocardiography has shown the presence of abnormalities of myocardial function in ankylosing spondylitis. This study uses both electrocardiography and radionuclide angiography to examine this further. The authors suggest that there are subtle abnormalities present in cardiac function mainly relating to left ventricular compliance affecting diastolic function.

Klebsiella, ankylosing spondylitis, and IgA antibody response p 233
Klebsiella species are more commonly isolated from faeces in patients with ankylosing spondylitis than in other arthritides and they carry antigens cross reacting with HLA-B27, so it has been postulated that

this may be important in the pathogenesis of the disease. IgA antibodies to klebsiella were again found to be increased in ankylosing spondylitis compared with other forms of arthritis or with inactive disease.

Lornoxicam in osteoarthritis (OA) p 238
Lornoxicam is a new oxican non-steroidal anti-inflammatory drug and this paper examined its efficacy in a multicentre, randomised, and double blind study in OA. It proved significantly better than placebo and a dose of 12 mg was probably best, though as with most non-steroidal anti-inflammatory drugs it had some effects on the gut.

Assessing OA of the knee p 243
There are no generally accepted methods for assessing OA of the knee and this paper is an attempt to rectify this. The method is described and examined for intra- and interobserver variation and looks to be useful.

Wegener's granulomatosis and genetic markers p 246
This disease is rare and we do not know its cause nor are we sure if it has a genetic association. The authors of this paper found a significant increase in the prevalence of HLA-DR1, however, and believe that chromosome 6 plays a part in its pathogenesis.

Raynaud's phenomenon and white blood cell activation in disease p 249
Systemic sclerosis and vibration white finger syndrome are common causes of secondary Raynaud's phenomenon; whereas there is probably an increase in inflammation in systemic sclerosis, we are not sure about the other. Increased white blood cell activity was shown probably to occur in both, indicating a likely element of inflammation.

Oligoarthritis and silent infections p 253
Oligoarthritis has many causes and may mimic reactive arthritis. Clinically silent infections may be present in as many as two thirds of patients and may well be a chlamydial infection. The HLA-B27 haplotype is a major risk factor for the development of oligoarthritis but not apparently for sacroiliitis.

Diuretic induced gout p 259
In elderly people diuretics are the most commonly prescribed drug and they may induce gout, but why are some people affected and not others? It seems that those liable to be affected are likely to have an additional cause of hyperuricaemia, such as impaired renal function.

Yttrium-90 radiosynovectomy p 262
A comparison of the efficacy of yttrium-90 radiosynovectomy in inflammatory or osteoarthropathies after two different regimens of immobilisation of the joint showed that there was no great difference in results between the two methods but that a short period of immobilisation after the injection is desirable. Radiosynovectomy has established its place as a safe and effective treatment for the inflamed joint, but its place in the management of osteoarthropathy is less clear.

A computer program using Bayes's theorem and arthritis diagnosis p 266
The authors have developed a computer program in order to elucidate the differential diagnosis of arthritis based on two variations of Bayes's theorem. The system needs development though.

CASE REPORTS

Methotrexate after pneumonitis in RA p 272
In some patients with RA we seem to exhaust our therapeutic options and we may have to reconsider reintroducing drugs that have caused complications in the past because we have few alternatives. Two cases are reported here of patients who developed pneumonitis when treated with methotrexate: the drug was tried again without inducing the lung problem and they did well, to the authors' great relief.

Juvenile RA and sulphasalazine induced hepatitis p 275
Sulphasalazine is increasingly used in the management of rheumatic diseases and though hepatotoxicity occasionally occurs, it has not been reported previously in juvenile RA. Two examples of it occurring in young patients are recorded here though and it may be confused with spontaneous liver involvement in the disease.

Mastocytosis and Sjögren's syndrome p 277
A man with Sjögren's syndrome was thought to have fibromyalgia but further examination showed that he had mast cell infiltration in several organs. It seems clear, therefore, that this syndrome may be associated with systemic mast cell disease.

Childhood SLE and cardiac tamponade p 279
Fortunately, cardiac tamponade is rarely seen as an initial symptom of SLE, but it occurred here in a young girl who presented with unusual disease. Pericardiectomy had to be performed.

DISPATCH

From Belgium p 281
Belgium is small but it is densely populated and it has a long and honourable rheumatological history. It has three languages and lies squeezed between the Anglo Saxons to the north, the Latins to the south, and the Germans to the east—no wonder it has such a fascinating past and an exciting future.

NOW AND THEN

Will Copeman p 283
Will Copeman was one of the great figures in rheumatology and he had to battle to have rheumatology accepted as a discipline in its own right. Rheumatology has now come of age and is developing throughout the world so it is timely that we look back on the achievements of a man who helped so greatly to establish the specialty. I remember with awe that tall and guardsman-like figure.

REVIEW

Pathogenesis of scleroderma p 286
We have a long way to go before we understand scleroderma. Fortunately, it is not common, but when it does affect a patient its effects can be devastating. We have just published a supplement about this disease, but it does no harm to remind ourselves of what we know of its pathogenesis; only in this way can we learn how to master it.

EDITOR

ANNOUNCEMENT

Dr A K Thould will be retiring from the editorship at the end of March 1992 and will be replaced by Dr Michael Doherty, previously an associate editor. Dr Doherty is a senior lecturer and consultant in rheumatology at the University of Nottingham and has wide experience in medical journalism. The *Annals* would like to wish him every success for the future and to thank Dr Thould for the time he has given to the journal and for the innovations he has introduced.