From the study of our cases we think that the process does not seem to be a coincidence of both diseases but rather of the action of the X factor or factors of RA upon the domain of AS which would result in a variant of associate AS. This would be the true 'rheumatoid spondyloarthritis'. Its rate of frequency, since the predominance of AS marked by HL-A 27 is 6% in our country, would be somewhat higher than that reported by Fallet, if our hypothesis proves to be correct. Evidently it would not reach the ratio of 1/1600 which is the ratio to be expected if every factor of RA, by incidence of the HL-A 27, would cause this mixed picture.

Ankylosing spondylitis and epidemic Reiter’s syndrome: genetics and environment. A. Calin and J. F. Fries

The greatly increased frequency of HL-A 27 in both ankylosing spondylitis (AS) and Reiter’s syndrome (RS) has been well recognized. Both environmental and genetic factors appear to contribute. To elucidate this interplay, two parallel studies were performed.

(1) Evaluation of 78 presumed ‘healthy’ HL-A 27 positive blood donors (30 males, 48 females) yielded 14 cases (20% and 16-7% respectively) of definite AS, the New York criteria being used as a minimum standard. 122 race, sex, and age-matched HL-A 27 negative controls failed to yield a single case. Using published disease frequencies, the expected prevalence of AS among HL-A 27 positive individuals should be 2% and 0.2% for males and females, respectively. In contrast, this study strongly suggests that at least 20% of subjects with HL-A 27 are likely to develop AS, and that the frequency is comparable in both sexes. (2) An attempt was made to locate and HL-A type the 9 men who developed RS after the 1963 epidemic of proven shigellosis in 602 individuals on a U.S. naval ship. To date, 5 have been traced and 4 of these are HL-A 27. Given the racial make-up of the U.S. navy, about 36 of those who developed dysentery would have been HL-A 27 positive, suggesting that between 12% and 25% of those at genetic risk developed RS after this single environmental insult.

It thus appears that in both AS and epidemic RS some 12% to 25% of those with HL-A 27 may develop the disease. In the case of RS this may follow shigellosis; in AS some unknown environmental insult may be implicated; in both there may be interplay with other unidentified genetic factors. The presence of typical clinical findings in the occasional HL-A 27 negative individual suggests either such additional operative genetic factors or ‘environmental over-ride’. Preliminary data showing that there is an increased proportion of HL-A 27 negative spondylitic patients with shigella dysentery or inflammatory bowel disease compared with idiopathic AS subjects, indicates that a sufficient environmental insult can result in the expression of disease even in a genetically ‘nonsusceptible’ individual.

Histocompatibility antigens in polyarthritis in the hand. J. Muñoz Gómez, M. A. Brancos Cunilla, and G. Ercilla Gonçalès

In 1958 Kellgren and Lawrence described a pattern of arthrosis in the hand, appearing mostly in women. It has been shown that when there are more than five arthritic joints in the hand, there is a significant correla-

tion (P < 0.01) with the existence of a pseudopodylo-
yllythesis secondary to arthrosis in the posterior inter-
apophyseal joints. This arthritic pattern seems to be
genetically determined. For this reason we attempted
to study the histocompatibility antigens in these cases.

There seems to be no significant statistical differences
comparing the frequency rates of the diverse antigens
in the arthritic group studied and in the controls.


HL-A frequencies in less common arthropathies. A. Robitaille, C. Cockburn, D. C. O. James, and B. M. Ansell (MRC Rheumatism Research Unit, Taplow, and Tissue Typing Laboratories, Westminster Hospital)

Published in full in the Annals, 35, 271.

Study of diagnostic importance of a group of immunological parameters in 212 rheumatic patients, with special reference to rheumatoid arthritis. E. Noguerà Hernando, A. Larrea Gayarré, E. Fernández Cruz, M. Kreisler, and A. Bootello

(1) The most frequent associations, referring to immuno-
logical alterations, are rheumatoid factor, ANA, and
doligonal increase of immunoglobulins, all of which are
basically visible in RA. (2) The increase in immunoglob-
ulin levels was observed in a great number of rheumatic
processes, and does not seem to be specific, constituting
an index of the disease activity. (3) With the exception
of RA, rheumatoid factor appeared in a low proportion
in other processes, 1 out of 5 in DEL, in 1 out of 2 in sclero-
derma, and in 4 out of 14 in nonspecific polyarthritis, in
our series. (4) ANA was present in 39.5% of seropositive
RA, among other processes. Titration and staining
pattern are of main importance for the diagnosis, as it
allows differentiation of two entities which at certain
evolutive stages may display great clinical similarity, as
with DEL and RA. (5) Low values of serum complement
were observed in RA (13-9%) and in other processes of the
so-called autoimmune diseases such as SLE and
scleroderma. (6) The presence of AAML is of specific
diagnostic importance as in the case of some chronic
hepatopathies, its incidence being low in RA (10%).
AAML showed more specificity for primary biliary
cirrhosis. We could only find it in one case of seropositive
RA (1-6%). Evidence of both in RS would reflect the
existence of one more autoimmune phenomenon.


Thirty-six patients with ankylosing spondylitis have
been treated with a daily dose of 500 mg naproxen for
1–30 months. Diagnosis was based on radiographic
evidence of sacroiliitis and characteristic symptoms
started before the age of 30. Patients with sacroiliitis
associated with psoriasis, ulcerative colitis, regional
ileitis, Reiter’s, and Behcet’s disease were excluded.
At the end of the first month of treatment 35 of 36 patients
assessed naproxen as being equal to or better than previous
therapy. At 12 months, 3 had gone into remission and
did not require an analgesic, 5 had stopped naproxen and started another analgesic finding prolonged treatment with naproxen ineffective. 28 continued naproxen. At 24 months 26 continued naproxen, 6 being in remission and 4 on other analgesics. At 12 months the 28 patients on naproxen had less pain (at rest P < 0.05, on movement P < 0.001), morning stiffness had decreased (P < 0.001), and immobility stiffness had markedly improved (P < 0.005) so that many patients can sit indefinitely without becoming stiff.

The first 10 patients to complete 6 months on naproxen took part in a double-blind cross-over trial comprising two consecutive 4-week periods, in one of which each patient took 500 mg naproxen, in the other identical placebo capsules, the order being randomized. 8 patients correctly identified the placebo capsules and were unable to complete the 4-week period because symptoms recurred (P = 0.019).

The patients who continue with naproxen are impressed by their improvement, continue in full-time employment, and have been able to increase their leisure activities without discomfort. Improvement in stiffness has been more marked than decrease in pain, and naproxen appears to be most useful in patients with ankylosing spondylitis where stiffness predominates. No persistent side effects were observed.

**Radiological lesions in coxitis mellitensis.** P. González de Vallado, A. Zea Mendoza, F. Atero Carrasco, J. Gijón Baños, and J. Beltran Gutierrez

466 cases of brucellosis were studied of which 383 (82.2%) showed articular symptoms and signs and 28 (6%) clinical and radiological evidence of hip damage. Of these 28 cases, 24 were men and 4 women, with an average age of 35 years. The hip was affected during the first 3 months of the illness in 20 cases, of which 7 displayed coxitis from the start of the brucellosis.

The most commonly observed symptomatology was the presence of pain in the inguinal region, radiating out through the front part of the thigh as far as the knee, with positive signs in the physical examination in almost all cases. 50% of the patients displayed at the same time brucellar infection in other osteoarticular locations, mainly in the lumbar spine. The diverse radiological patterns observed in this series can be classified according to certain types, the most frequent of which, because of its incidence in cases of short evolution, was the existence of localized areas of osseous demineralization, predominantly in the cotyloid rim.

Analysis of these radiological findings allows us to suggest that in a great number of cases, coxitis mellitensis starts by osteitis in some area close to the joint, although in other cases a capsul-synovial origin cannot be discounted. With appropriate antibiotic treatment and local rest the prognosis of coxitis mellitensis is good.

**Table I** Overall summary

<table>
<thead>
<tr>
<th>12-month follow-up</th>
<th>24-month follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>In remission and off all drugs</td>
<td>3 6</td>
</tr>
<tr>
<td>Naproxen ineffective; other analgesics effective</td>
<td>5 4</td>
</tr>
<tr>
<td>Continue naproxen</td>
<td>28 26</td>
</tr>
<tr>
<td>Total</td>
<td>36 36</td>
</tr>
</tbody>
</table>

**Table II** Patients remitting

<table>
<thead>
<tr>
<th>Months on naproxen</th>
<th>Reason for withdrawal</th>
<th>Result of follow-up</th>
<th>Months of follow-up after stopping naproxen</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>In remission</td>
<td>Continued remission</td>
<td>23</td>
</tr>
<tr>
<td>7</td>
<td>In remission</td>
<td>Continued remission</td>
<td>17</td>
</tr>
<tr>
<td>12</td>
<td>In remission</td>
<td>2 relapses, both controlled by restarting naproxen</td>
<td>15</td>
</tr>
<tr>
<td>13</td>
<td>In remission</td>
<td>1 relapse, controlled by restarting naproxen</td>
<td>13</td>
</tr>
<tr>
<td>18</td>
<td>In remission</td>
<td>Continued remission</td>
<td>6</td>
</tr>
<tr>
<td>18</td>
<td>In remission</td>
<td>Continued remission</td>
<td>6</td>
</tr>
</tbody>
</table>

**Table III** Reasons for withdrawal

<table>
<thead>
<tr>
<th>Months on naproxen</th>
<th>Reason for withdrawal</th>
<th>Result of treatment with other analgesic</th>
<th>Months of follow-up after stopping naproxen</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ineffective</td>
<td>Indomethacin effective</td>
<td>26</td>
</tr>
<tr>
<td>6</td>
<td>Ineffective</td>
<td>Indomethacin effective and reduced remission after 11/12</td>
<td>23</td>
</tr>
<tr>
<td>10</td>
<td>Ineffective</td>
<td>BTZ effective</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>Partially effective</td>
<td>BTZ effective</td>
<td>21</td>
</tr>
<tr>
<td>10</td>
<td>Effective 7/12, thereafter ineffective</td>
<td>BTZ, distalgesic, Ketoprofen ineffective, ACTH partially effective</td>
<td>14</td>
</tr>
</tbody>
</table>
Naproxen in treatment of ankylosing spondylitis [Proceedings].
H F Hill and A G Hill

doi: 10.1136/ard.35.3.287-d

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