Correspondence

A recent review has suggested that reports of gold salts being inhibitory to adjuvant arthritis following parenteral administration may be explained by counterirritancy. While we cannot completely preclude this possibility, the following points seem relevant. The injection sites were examined daily and no signs of irritation or necrosis were observed, the animals were not distressed, and there were no adverse effects on bodyweight gain. NATM had no effect on the acute indomethacin-sensitive inflammation at day 3, but the secondary arthritis was inhibited in a dose-dependent manner, with the activity being maintained for 14 days after cessation of dosing. Finally, the systemic non-inflammatory disease was modified, with NATM reversing the thymic regression and splenic hypertrophy seen in adjuvant arthritic rats.

These results are similar to those obtained by Walz et al., who in addition showed a correlation between antiarthritic activity and serum gold levels. It appears that under certain conditions adjuvant-induced arthritis in the rat can be used to evaluate the efficacy of gold salts.

Beecham Pharmaceuticals, 
Medicinal Research Centre, 
Coldharbour Road, 
The Pinnacles, 
Harlow, 
Essex CM19 5AD

References
3 Sofia R D, Knoblock L C, Douglas J F. Effect of concurrent administration of aspirin, indomethacin or hydrocortisone with gold sodium thiomolate against adjuvant-induced arthritis in the rat. Agents Actions 1976; 6: 728-34.

Hypogammaglobulinaemia associated with gold therapy

SIR, The recent report of two patients with hypogammaglobulinaemia associated with gold therapy prompts me to report the case of a man with seronegative rheumatoid arthritis who developed hypogammaglobulinaemia while on gold therapy. The development of hypogammaglobulinaemia coincided with a complete clinical remission. His immunoglobulin levels have returned to normal, and he has remained in remission for nearly five years.

The patient was well until 1976 when at age 46 he developed a symmetrical polyarthritis. The latex fixation test was negative. In April 1978 despite salicylate therapy and naproxen 250 mg twice a day, he still had persistent active synovitis of the wrists, metacarpophalangeal joints, proximal interphalangeal joints, knees, and metatarsophalangeal (MTP) joints. The latex test was again negative. Radiographs of the hands were normal, but the feet showed small erosions of the right third and left fifth MTP joints. The serum IgG level was raised, and serial levels are shown in Table 1. He was started on sodium aurothiomalate 50 mg intramuscularly (IM) weekly, and by December 1978 he was markedly improved with only synovitis of both wrists. However, serum levels of IgA and IgM had fallen below normal levels. He was continued on gold 25 mg IM monthly and was seen again in January 1980 when he was in complete remission. However, his serum IgG level had fallen below normal. Gold was discontinued as were the salicylates and naproxen, and his immunoglobulin levels returned to normal. No infections occurred during the course of his illness. He remains in clinical remission, and radiographs of his hands and feet remain unchanged.

It is interesting to speculate whether there is a relationship between the development of hypogammaglobulinaemia and the excellent response to gold seen in this patient.

<table>
<thead>
<tr>
<th>Date</th>
<th>Serum IgG</th>
<th>Serum IgA</th>
<th>Serum IgM</th>
<th>Total dose of gold (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 May 1978</td>
<td>20-98</td>
<td>2-11</td>
<td>1-17</td>
<td>60</td>
</tr>
<tr>
<td>8 Aug 1978</td>
<td>12-91</td>
<td>1-12</td>
<td>0-16</td>
<td>735</td>
</tr>
<tr>
<td>6 Dec 1978</td>
<td>6-1</td>
<td>0-26</td>
<td>0-19</td>
<td>1200</td>
</tr>
<tr>
<td>4 Jan 1980</td>
<td>3-12</td>
<td>0-20</td>
<td>0-10</td>
<td>1540</td>
</tr>
<tr>
<td>27 Feb 1980</td>
<td>4-11</td>
<td>0-82</td>
<td>0-32</td>
<td></td>
</tr>
<tr>
<td>19 Nov 1980</td>
<td>6-91</td>
<td>0-63</td>
<td>0-53</td>
<td></td>
</tr>
<tr>
<td>16 Oct 1984</td>
<td>8-64</td>
<td>1-98</td>
<td>1-03</td>
<td></td>
</tr>
<tr>
<td>Normal (g/l)</td>
<td>5-6-15-12</td>
<td>1-04-4-48</td>
<td>0-66-3-52</td>
<td>(by nephelometer)</td>
</tr>
</tbody>
</table>

Table 1 Serum immunoglobulins

Non-steroidal anti-inflammatory drugs and adverse renal effects

SIR, We read with interest the report by Sellars et al. of the induction of nephrotic syndrome and renal impairment

Rheumatic Disease Unit, 
Health Sciences Centre, 
800 Sherbrook Street, 
Winnipeg, 
Manitoba, 
Canada R3A 1M4

Reference

F R MANGAN
M J THOMSON

Active synovitis of the wrists, metacarpophalangeal joints, proximal interphalangeal joints, knees, and metatarsophalangeal (MTP) joints. The latex test was again negative. Radiographs of the hands were normal, but the feet showed small erosions of the right third and left fifth MTP joints. The serum IgG level was raised, and serial levels are shown in Table 1. He was started on sodium aurothiomalate 50 mg intramuscularly (IM) weekly, and by December 1978 he was markedly improved with only synovitis of both wrists. However, serum levels of IgA and IgM had fallen below normal levels. He was continued on gold 25 mg IM monthly and was seen again in January 1980 when he was in complete remission. However, his serum IgG level had fallen below normal. Gold was discontinued as were the salicylates and naproxen, and his immunoglobulin levels returned to normal. No infections occurred during the course of his illness. He remains in clinical remission, and radiographs of his hands and feet remain unchanged.

It is interesting to speculate whether there is a relationship between the development of hypogammaglobulinaemia and the excellent response to gold seen in this patient.

Rheumatic Disease Unit, 
Health Sciences Centre, 
800 Sherbrook Street, 
Winnipeg, 
Manitoba, 
Canada R3A 1M4

Reference
Hypogammaglobulinaemia associated with gold therapy.

T Hunter

*Ann Rheum Dis* 1985 44: 212
doi: 10.1136/ard.44.3.212-a

Updated information and services can be found at:

http://ard.bmj.com/content/44/3/212.1.citation

**Email alerting service**

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

**Notes**

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/