Clinical and Other Notes.

TREATMENT OF ACUTE GONORRHOEA BY A MASS UNIT (10 GRAMS) DOSAGE OF SULPHAPYRIDINE.

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The search for an optimum dosage of sulphapyridine and allied drugs in fresh uncomplicated cases of gonorrhœa continues.

This is an analysis of 485 cases treated at a Military Hospital in England by one large (10 grams) dose of sulphapyridine administered immediately upon admission.

It was intended originally to complete a series of 500 cases treated with this drug, and of another 500 treated with sulphathiazole in similar dosage, and to collate these with another series including some sulphadiazine-treated cases, in conjunction with Major J. Marshall, R.A.M.C., and Dr. René Guillermin of the Fighting French Forces. The exigencies of the Service however made it impossible to complete this research.

The method is at present only considered suitable under the best conditions in a temperate climate; I have not thought it wise to continue it under active service conditions in a sub-tropical climate as a routine treatment though further experience may modify this view.

I am satisfied however that the results obtained in England compare not unfavourably with other schemes of dosage.

Method of Administration.

As soon as the diagnosis of acute gonococcal urethritis is established microscopically, 20 tablets of sulphapyridine are crushed to powder which is stirred into half a pint of milk and given as soon as is practicable after a patient’s admission to hospital.

He is confined to bed for twenty-four hours on a fluid diet and made to drink copiously of water or barley water under supervision. At least five pints a day should be consumed. He is encouraged to open his bowels as freely as possible but no aperient is given, unless strongly indicated to lessen the incidence of vomiting.

The occurrence of nausea after this large dose is frequent but actual vomiting is not.

All patients are given as a routine a stock mixture—

| B Pot. bic. | ... | ... | ... | ... | gr. x |
| Pot. cit. | ... | ... | ... | gr. xx |
| Tinct. hyoscyami | ... | ... | ... | m x |
| Infus. buchu | ... | ... | ad | 7/8 |

and this is taken for the duration of their stay in hospital three times a day.
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General Observations.

At the commencement of this series it was not felt wise to rely solely on a unit dose only and a further 4 grams were given during the subsequent forty-eight hours. In all, 86 patients, i.e. 17.7 per cent of the total, had this extra maintenance dose. This was however gradually dropped, as it was found that patients did just as well without it, and the figures show that the average stay in hospital was slightly longer when the maintenance dose was given.

Having had extensive experience of the "intensive" or modified "Aberdeen" scheme of therapy I am of the opinion that at least as good results are obtained from this much less toxic mass unit dosage with vastly less constitutional disturbance and great economy of sulphapyridine tablets.

In no single case in this series was haematuria or anuria observed nor were there any disquieting symptoms.

Instrumental interference and prostatic massage have been reduced to a minimum in straightforward cases, the former being confined to final tests of cure and the latter to third and final surveillance tests of cure.

Under Service conditions an investigation of this nature can never be entirely satisfactory owing to the impossibility of personally following up

<table>
<thead>
<tr>
<th>Number of patients</th>
<th>Had unit dosage sulphapyridine</th>
<th>Had extra 4 gm. maintenance dose sulphapyridine</th>
<th>Had additional routine course sulphapyridine, viz., 25 gm. in 7 days, 6, 4, 3, 3, 3, 3, 3</th>
<th>Had irrigations (average period 5.5 days)</th>
<th>Complications</th>
<th>Passed final test of cure</th>
<th>No traceable final test</th>
<th>Average stay in hospital—days</th>
<th>Remarks</th>
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</thead>
<tbody>
<tr>
<td>41</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
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<td>-</td>
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<tr>
<td>46</td>
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<td>+</td>
<td>-</td>
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<td>56</td>
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<td>+</td>
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<td>+</td>
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<td>-</td>
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<td>+</td>
<td>11.5</td>
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<tr>
<td>49</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>25</td>
<td>4 had two routine courses sulpha-pyridine, 1 had one routine course sulphonamide</td>
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<tr>
<td>48</td>
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<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>27</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>12.5</td>
<td>Complications Right epididymitis, 5</td>
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<tr>
<td>7</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>30.5</td>
<td>Left epididymitis, 2 Prostatitis, 7</td>
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<tr>
<td>485 Total</td>
<td>Total</td>
<td>Total Average Stay in Hospital</td>
<td>.</td>
<td>16.6</td>
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</table>
a large proportion of patients as far as their final tests of cure (three months later). Constant moves and postings made it impossible to trace more than 43 per cent right up to final test.

I have however made frequent inquiry among my colleagues in charge of other V.D. Centres and have had no evidence that these patients subsequently did less well than on other schemes of treatment. The results are summarized below.

From the above analysis it will be seen that 379 patients, i.e. 78 per cent, required no further routine course of sulphapyridine and their average stay in hospital was 9·4 days.

106 patients, i.e. 21·8 per cent, required a further course or courses of sulphapyridine and their average stay was 23·7 days. The total average stay of all cases was 16·6 days.

There were seven known relapses though the possibility of re-infection has always been considered.

Irrigations when given were anterior or posterior as indicated and were of a solution of potassium permanganate 1:8000. They were given either once or twice daily.

CONTACTS.

In spite of every effort being made to trace the infecting contact and ensure that she attended the nearest clinic for examination and treatment it was only found possible to trace 31 per cent.

I have always found that in most cases the soldier was collaborative and willing to help in this important matter as far as he could but it is remarkable how large a proportion of infections were the result of a single casual association where neither the name nor the address had been inquired, no attempt had been made to obtain a second rendezvous and no description of any value could be obtained, and this by no means in all cases under the influence of alcohol. The sociological implications here are not without interest.

6 per cent of infections were due to admitted professional prostitution.
2·1 per cent were attributable to infection by members of the Women’s Services.

Three men claimed to have been infected by their fiancées.
One was of homosexual origin.
15 per cent patients denied exposure to risk and could not be shaken in their denial.
15 per cent were attributed to marital infection. The rise in this last percentage has been markedly noticeable in the latter half of 1942. In 1941 my figures showed a marital percentage of 8 per cent. This also is of sociological significance.

The remaining 62 per cent were the result of "amateur" encounters or liaisons.

I am indebted especially to Corporals Willis, Gavin, and Mapes, R.A.M.C., for their assistance, clinical and clerical, throughout this investigation.