Clinical and other Notes.

COLLOIDAL THERAPY IN MILITARY MEDICAL PRACTICE.

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The following notes on a series of cases treated at the Officers' Hospital, Abbassia, Egypt, with various colloidal preparations, may be of some interest.

The number of cases treated is small because only small quantities of these drugs were obtainable, but the results were encouraging.

With the exception of the manganese butyrate, all the drugs used were Crookes' preparations. All appeared to be stable and keep well, even in this country.

The following table gives the particulars of drugs used, cost (including overhead charges), numbers treated, etc.:

<table>
<thead>
<tr>
<th>Name of drug</th>
<th>Number of patients treated</th>
<th>Average cost per patient</th>
<th>Average cost per patient per day</th>
<th>Total cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collosol manganese (double sol.)</td>
<td>11</td>
<td>0 8·18</td>
<td>0 0·50</td>
<td>0 7 6</td>
</tr>
<tr>
<td>Manganese butyrate</td>
<td>12</td>
<td>0 3·75</td>
<td>0 0·39</td>
<td>0 3 9</td>
</tr>
<tr>
<td>Collosal sulphur and collosoI</td>
<td>3</td>
<td>4 3·00</td>
<td>0 1·44</td>
<td>0 12 9</td>
</tr>
<tr>
<td>Iodine combined</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Collosal calcium</td>
<td>2</td>
<td>3 6·00</td>
<td>0 1·90</td>
<td>0 7 0</td>
</tr>
<tr>
<td>Collosal argentum</td>
<td>1</td>
<td>3 0·00</td>
<td>0 3·00</td>
<td>0 3 0</td>
</tr>
<tr>
<td>Collosal sulphur cremor</td>
<td>2</td>
<td>0 8·00</td>
<td>0 1·44</td>
<td>0 1 4</td>
</tr>
<tr>
<td>Collosal argentum ointment</td>
<td>1</td>
<td>1 10·00</td>
<td>0 0·68</td>
<td>0 1 0</td>
</tr>
<tr>
<td>Totals</td>
<td>39*</td>
<td>1 4·28</td>
<td>0 1·04</td>
<td>1 17 2</td>
</tr>
</tbody>
</table>

* Of these, ten were in-patients and twenty-two out-patients.

Commenced treatment of first case December 3, 1923
Statement up to May 30, 1924
Equals 180 days.

For comparison, the following are averages in this country for drugs and dressings only as worked out by the Corps of Military Accountants:
- Average cost per out-patient per diem, 2d.
- Average cost per in-patient per diem, 6d.

The drugs which gave the best results and which it is considered are best suited to military medical practice are the collosol manganese and manganese butyrate. The therapeutic results were the same with both, but in view of the cost and the time under treatment, the latter is undoubtedly to be recommended. The cases treated were all types of coccus infections, furunculosis, impetigo, lymphadenitis, acne vulgaris, carbuncle, nongonococcal urethritis, etc.; many of the cases had already had one and sometimes two courses of autogenous vaccines. Appropriate local applications, i.e., fomentations, ointments, etc., were used in conjunction with these drugs. The results obtained were exceptionally good.
Next in order were the collosol sulphur and collosol iodine. One case (a N.C.O., C.M.A.) suffering from long-standing fibro-myositis was greatly improved and went through the first winter for many years without pain. He has now purchased further supplies for himself as no more can be given him. The second case, suffering from muscular rheumatism, was cured and was clear of any symptoms for four months. This patient, a senior officer, had a recurrence four months after ceasing treatment; he has proceeded home on leave and is purchasing further supplies. The third case, an officer with acute myositis, was improved but not cured as supplies ran short in the middle of the treatment.

Cases treated with collosol argentum, collosol sulphur cream or collosol argentum ointment did not appear to derive much benefit except one very long-standing and resistant case of sycosis barbæ, which was improved but not cured with collosol argentum ointment.

Collosol calcium was used in one case of ischio-rectal fistula and in one case of tuberculosis. In the latter disease a certain amount of improvement was observed and, although the disease was very advanced, the night sweats were kept in check and the amount of blood in the sputum was reduced.

The collosol manganese and manganese butyrate were given by intramuscular injection, collosol calcium by subcutaneous injection, collosol sulphur by the mouth, collosol iodine by the mouth and intravenously, and the remainder as local applications. With the exception of some stiffness in the sites of injection, no toxic manifestations were observed in any of the cases.

It has been found that a large number of cases of sickness causing absence from duty for short or long periods, especially in a country such as this (Egypt), are due to septic skin infections caused by dirt, mosquito bites, and debility resulting from climatic conditions. These infections are rapidly cured and the period under treatment and consequent loss of efficiency are greatly lessened by the manganese preparations.

The author strongly advocates the addition of one two-cubic-centimetre Record syringe with suitable needles for intravenous, intramuscular and subcutaneous injections, to the equipment of every medical inspection room, and that supplies of manganese butyrate be made available from Army Medical Stores.

The technique is simple and can be easily carried out in the medical inspection room. The syringe and needles need never be boiled but should be kept suspended in a mixture of equal parts chloroform, lysiol and rectified spirit, and are then sterile. When required for use they can be taken out and put in plain spirit. A glance at the table shows that the cost is well below that incurred by the ordinary methods of treatment.

In addition it is considered that other collosol products, especially the sulphur and iodine, should be available for use in military hospitals in suitable cases.
Although, perhaps, not strictly coming within the scope of this article, the author desires to put in a plea for the greater use of the syringe in treatment in the Army. Every year, more and more drugs are being put up in forms suitable for injection. In the author’s opinion the advantages greatly outweigh the slightly disagreeable nature of the treatment. The dosage is more certain and more easily controlled, the action quicker and there is less likelihood of digestive disturbances than when given orally. As an example, cases at this hospital when convalescent after fevers, etc., are given a tonic of glycerophosphates, cacodylates of soda and strychnine sulph., subcutaneously, and their period in hospital and absence from duty greatly shortened in consequence.

I am greatly indebted to Colonel W. H. S. Nickerson, V.C., C.B., C.M.G., D.D.M.S., B.T. in E., and Colonel H. Ensor, C.B., C.M.G., D.S.O., R.A.M.C., S.M.O., Abbassia, and O.C. Officers’ Hospital, for obtaining authority for the local purchase of the drugs used and for permission to publish these notes.

PRELIMINARY REPORT ON THE RESULTS OF INVESTIGATIONS INTO THE CAUSATION OF BLACKWATER FEVER IN SOUTHERN RHODESIA.

PRESENTED TO THE LEGISLATIVE COUNCIL, 1923.

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In all parts of the world where pernicious malaria is rife, blackwater fever occurs. On the other hand, in those countries where only benign tertian occurs, blackwater fever is unknown. Clinically, pernicious malaria in Southern Rhodesia varies enormously. In one type, the clinical symptoms may not be severe, but the disease is active, more or less chronic, with gradually progressive anaemia. A more or less continual haemolysis goes on; the liberated haemoglobin is dealt with by the liver and converted into bile pigments, and during this stage the only manifestations of free haemoglobin are biliousness, anaemia and bilirubin in the urine. There is at this stage of the malaria no haemoglobin in the urine, but bile may occur simulating blackwater. All these cases of pernicious malaria of a chronic character might suitably be termed pre-blackwater.

An analysis of the hospital statistics for Southern Rhodesia for the ten years ending 1922 shows 6,608 admissions for malaria, and 492 for blackwater fever; the curves of these two diseases conform very closely, rising and falling together in a striking way. The worst months for blackwater fever are April, May and June, as it is during these months the full effects of malaria occur, and the sudden drop in the incidence of blackwater during the months of July, August and September corresponds in a remarkable manner with the diminution of malaria and the disappearance of mosquitoes.