IODOFORM-OINTMENT INJECTIONS IN THE TREATMENT OF SUPPURATIVE ADENITIS OF THE GROIN.¹

BY JAMES R. HAYDEN, M.D.,
CHIEF OF VENEREAL CLINIC, COLLEGE OF PHYSICIANS AND SURGEONS (COLUMBIA COLLEGE); PROFESSOR OF GENITO-URINARY AND VENEREAL DISEASES, MEDICAL DEPARTMENT OF THE UNIVERSITY OF VERMONT; VISITING SURGEON TO THE CITY HOSPITAL, NEW YORK.

The chief objects to be obtained in the treatment of suppurating inguinal buboes are their rapid disappearance, an amelioration of pain, and the absence of a compromising scar in the groin.

To this end various surgical procedures have been suggested from time to time, but it was not until 1856, when Broca,² Roux, Marchal, Abeille, and others advocated aspiration of the pus and injection of diluted tincture of iodine into the abscess cavity, that such favorable results were in a degree obtained.

In 1857 Lebert³ reported a number of successful cases treated in a similar manner, except that he evacuated the pus through a small incision and injected the pure tincture of iodine.

Again, in 1871, Teackle⁴ speaks of this method as being remarkably successful, and quotes several cases in which he has employed it.

Scott Helm,⁵ in 1886, was, I believe, the first to substitute iodoform for tincture of iodine, and used it in the following manner:

The parts were cleansed and anesthetized by means of ether spray, the pus was drawn off with a hypodermic, and the abscess cavity washed out with a weak solution of carbolic acid. Iodoform suspended in glycerin was then injected, the needle withdrawn and the puncture closed with collodion; over this an ordinary dressing and spica bandage were applied. Twenty-two cases were treated in this manner with but one failure.

Later, Helm substituted oleic acid for glycerin, and finally iodol for iodoform.

In 1889, Von Eichstoff⁶ reported a series of cases treated by injections of iodoform and ether which he employed in two different ways, as follows:

First method. The pus was withdrawn and the cavity irrigated with boric acid solution, and then injected with the iodoform and ether mixture, the puncture being covered with an ordinary dressing, which was

¹ Read before the American Association of Genito-Urinary Surgeons, Niagara Falls, May 28, 1895.
³ Wiener med. Wochenschrift, 1858, No. 43.
⁴ Medical Record, 1871, vi. 344.
⁵ Chicago Medical Journal and Examiner, 1886, liii. No. 3.
⁶ Thèse de Paris, Traité des Bubons, 1889.
left in place for three days. In some cases he had to make a second injection, but never a third. A cure was accomplished in from three to eight days.

Second method. The parts were cleansed and the iodoform-ether mixture injected directly into the abscess cavity without evacuating the pus. As a rule, two injections had to be employed before a cure was accomplished, which on an average took about twelve days.

In the same year Fontan described very minutely the treatment of suppurating buboes by injections of iodoform vaseline. He gives a total of forty-one cases so treated, the average time for cure being six to seven days. His method of procedure is as follows: The parts are shaved and cleaned; the bubo opened with a lancet and all the pus forced out; the abscess sac is then irrigated with diluted Van Swieten's fluid, and iodoform-vaseline injected with a glass syringe, previously warmed in hot water. A cold wet dressing is applied in order to congeal the ointment at the opening. In some cases it was necessary to resort to an injection a second time.

In 1893, W. K. Otis reported very favorable results in sixteen cases in which he used injections of iodoform ointment in a similar manner. Having employed this plan of treatment with such satisfactory results, I feel justified in reporting the few cases so operated on; these were not selected, but taken at random as they entered the hospital and clinic. The steps in the procedure are similar to those advocated by Fontan, with the addition of the peroxide of hydrogen, and are as follows:

1. The operative field is shaved and rendered surgically clean in the usual manner.
2. A few drops of a 4 per cent. solution of cocaine are injected beneath the skin where the puncture is to be made.
3. A straight sharp-pointed bistoury is then thrust well into the most prominent part of the tumor until pus flows.
4. All of the pus is forced out through this opening by firm but gentle pressure, as this procedure is, as a rule, very painful.
5. The abscess cavity is irrigated with pure peroxide of hydrogen until it returns particularly clear.
6. It is then irrigated with 1 : 5000 bichloride of mercury solution, all of which is carefully squeezed out.
7. The now thoroughly cleansed abscess cavity is completely filled, but not painfully distended, with 10 per cent. iodoform ointment by means of an ordinary conical glass syringe, previously warmed in hot water.
8. A cold wet bichloride dressing is applied with a fairly firm spica.

bandage, the cold congealing the ointment at the wound, and thus preventing its escape into the dressing.

The patient should be kept very quiet for the first twenty-four to forty-eight hours, rest in bed being preferable, although not absolutely necessary.

The dressing is removed at the end of the third or fourth day and the parts examined; if pus has reaccumulated or the ointment escaped into the dressing, a second injection may be made. If, on the other hand, all looks well, the first dressing is replaced by a gauze pad and spica bandage, and the patient told to report in two or three days for examination.

In a few of the above series of cases several drops of an oily serous fluid were observed at the first dressing escaping from the puncture; this fluid was carefully wiped off and a sterilized gauze dressing applied, recovery being in no way retarded by the exudation.

The following table gives the etiology, amount of pus evacuated, number of injections employed, and time for cure in each case:

<table>
<thead>
<tr>
<th>Case</th>
<th>Etiology</th>
<th>Amount of pus</th>
<th>Number of injections</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gonorrhoea: chancroids</td>
<td>12 drachms.</td>
<td>One.</td>
<td>Cure in 14 days.</td>
</tr>
<tr>
<td>2</td>
<td>Gonorrhoea</td>
<td>4 &quot;</td>
<td>One.</td>
<td>&quot; 10 &quot;</td>
</tr>
<tr>
<td>3</td>
<td>Chancroid</td>
<td>12 &quot;</td>
<td>One.</td>
<td>&quot; 14 &quot;</td>
</tr>
<tr>
<td>4</td>
<td>Chancroids</td>
<td>3 &quot;</td>
<td>Two.</td>
<td>&quot; 7 &quot;</td>
</tr>
<tr>
<td>5</td>
<td>Gonorrhoea</td>
<td>6 &quot;</td>
<td>One.</td>
<td>&quot; 14 &quot;</td>
</tr>
<tr>
<td>6</td>
<td>Chancroid: chancroids</td>
<td>11 &quot;</td>
<td>One.</td>
<td>&quot; 7 &quot;</td>
</tr>
<tr>
<td>7</td>
<td>Chancroid</td>
<td>4 ounces.</td>
<td>One.</td>
<td>&quot; 21 &quot;</td>
</tr>
<tr>
<td>8</td>
<td>Chancroid: chancroid</td>
<td>2 &quot;</td>
<td>Two.</td>
<td>&quot; 21 &quot;</td>
</tr>
<tr>
<td>9</td>
<td>Chancroids</td>
<td>12 drachms.</td>
<td>One.</td>
<td>&quot; 7 &quot;</td>
</tr>
<tr>
<td>10</td>
<td>Chancroid</td>
<td>6 &quot;</td>
<td>One.</td>
<td>&quot; 14 &quot;</td>
</tr>
<tr>
<td>11</td>
<td>Gonorrhoea</td>
<td>6 &quot;</td>
<td>One.</td>
<td>&quot; 8 &quot;</td>
</tr>
<tr>
<td>12</td>
<td>Gonorrhoea</td>
<td>4 &quot;</td>
<td>One.</td>
<td>&quot; 10 &quot;</td>
</tr>
<tr>
<td>13</td>
<td>Chancroid</td>
<td>3 &quot;</td>
<td>One.</td>
<td>&quot; 11 &quot;</td>
</tr>
<tr>
<td>14</td>
<td>Gonorrhoea: chancroid</td>
<td>5 &quot;</td>
<td>One.</td>
<td>&quot; 12 &quot;</td>
</tr>
<tr>
<td>15</td>
<td>Gonorrhoea</td>
<td>12 &quot;</td>
<td>One.</td>
<td>&quot; 12 &quot;</td>
</tr>
</tbody>
</table>

Suppurative action and pain ceased after one injection of the iodoform ointment, except in two cases; in these the injection had to be repeated on account of a slight reaccumulation of pus.

None of the above cases were pronounced cured until firm pressure in the groin elicited neither pain nor fluctuation, and the overlying skin had resumed its normal appearance.

In order to secure the most favorable results from this method, it should only be employed when the glands are quite thoroughly broken down, so that the iodoform may come in direct contact with all of the infected tissues.

It is not, of course, claimed that this method will succeed in every case of suppurative adenitis, but its many advantages over the more
FEVER IN THE COURSE OF BRIGHT'S DISEASE AND IN URÆMIA.

BY ALFRED STENGEL, M.D.,
INSTRUCTOR IN CLINICAL MEDICINE, UNIVERSITY OF PENNSYLVANIA; ASSISTANT PHYSICIAN TO THE UNIVERSITY HOSPITAL; PHYSICIAN TO THE HOWARD HOSPITAL.

Among the many and various symptoms of acute and chronic nephritis that have received special attention the temperature has, comparatively speaking, been neglected, though a few authors have given it considerable study. These will be alluded to more particularly in discussing the various conditions under which fever may occur and the forms it is apt to assume.

There are three groups of cases of distinct character in which acute or chronic nephritis and elevation of the body temperature are found to be associated. In the first group are included cases of mild febrile reaction at the beginning of acute nephritis; in the second the elevated temperatures result from complicating diseases, while the third and least well recognized group is that in which the temperature is elevated in the course of the uræmic state. It is to the latter that I wish to call attention more particularly in this paper, but it will be interesting, I think, to consider briefly the other groups for the sake of completeness.

I. The temperature at the onset of acute Bright's disease has quite commonly been found to be elevated. This elevation is rarely marked enough to attract more than passing attention, and little study has been made of its causes. Without attempting to enter upon the broad question of the pathogenesis of Bright's disease, we may say that this early slight fever is due either to the inflammatory or degenerative lesion of the kidney, to poisoning of the system, on account of the retention of deleterious substances which the kidney, as a rule, excretes, or, as would sometimes seem probable, from the primary infection or intoxication, which is to be looked upon rather as the cause than as the result of the disease of the kidney. The clinical fact, however, is well known. In the cases appended the type and degree of pyrexia usually observed are well illustrated.