

perature rose from  $1\frac{1}{2}^{\circ}$  to  $4^{\circ}$ , as shown by the thermometer in the rectum. When the thermometer was placed in the mouth, the variations from the average normal were unsatisfactory; in one case there was an increase of nearly  $5^{\circ}$ , but in others there was a slight decrease.

The pulse, as indicated by the radial and temporal arteries, was without exception materially slower, a circumstance which it is difficult to account for, but it must be taken as an indication of great practical importance.

It will be seen from the foregoing results that a routine plan of treatment is quite inadmissible in abdominal constipation and obstructive conditions of the hepatic ducts. If we only ascertain the exact nature of the case, the exact procedure to be followed will suggest itself. It is because this is not done that we hear of so many failures even after weeks of treatment. The following cases may perhaps be of some practical use, as showing the conditions that existed and the manipulations employed for their successful treatment.

CASE 1.—The patient, a clerk, complained of nothing but the constipation from which he suffered for years. He presented a fairly healthy appearance; the muscular system was well developed, and the abdominal wall was normal in appearance and natural to the touch. In this case the manipulations were confined to short sharp tappings, practiced in the direction of the ascending, transverse, and descending colon. After about eight minutes deep strokings were resorted to for a few minutes, but after a time it was sufficient to practise the former alone. This man was perfectly cured after five weeks' treatment. Lately for cases of this sort I am in the habit of using the faradic current for about five minutes, and commencing with four cells. The instrument used is Coxeter's new patent, a most perfect machine.

CASE 2.—This patient was a middle-aged lady, with a history of uterine trouble. She could walk but very imperfectly, and complained soon of a feeling of exhaustion. The entire muscular system was wanting in tone, the abdominal muscle being particularly weak and flabby. She

complained of a sense of weariness along the spine, but there was never actual pain. So far as could be ascertained, the secretions were normal, except that the urine frequently contained large quantities of urea. I believe that this condition will be found to exist in a large class of neurasthenics when no degenerative changes are to be found in the spinal cord, but simply atony brought on in most cases by overwork or anxiety. This case will be found typical of a large number of others, and, as it is the constipation which gives the most trouble, it is the symptom for which the medical man is usually consulted. Here there is loss of tone not only in the abdominal muscles, but also atony of the intestinal walls, and our object must be to strengthen those parts. This is best attained by certain manipulations, which include circular movements, kneading, and *tapotement* or *petrissage*. The first procedure can be carried out either with one or both hands, and it is necessary that the abdominal walls should be slightly relaxed, so that the intestines can be reached and acted directly on. But in a case of this nature, although abdominal massage will effect a great deal of good, it will not be productive of lasting benefit if we omit to massage the spine. The cause of the constipation is partly situated here; there is functional derangement of the cord, and until this is removed by mechanical stimulation it is hopeless to expect a complete cure. In these cases I have noticed that from the first day in which massage was commenced the excessive secretion of urea decreased, and after a week had disappeared altogether, leaving the urine perfectly normal. This is the first time that a similar observation has been made, although it has been admitted that galvanisation of the spine has a similar effect where an atonic condition of the spinal cord is found to exist.

CASE 3.—This case is typical of that large class of both sexes who enjoy good health and suffer no inconvenience, except that occasioned by constipation. The abdominal walls were flabby and pendulous, and characterised by great weakness. In cases of this sort the manipulations must be directed towards strengthening the abdominal walls, and for this purpose the