CASE.—A housekeeper, aged 38, single, came under my care in November last. Sixteen months ago, she first noticed a swelling in the right breast, which gradually grew larger, and was excised in February 1874. Five weeks later, a fresh tumour had already formed, and was likewise removed by excision. Soon afterwards, numerous cancerous nodules sprang up about the cicatrices in the axillary glands, and also in the left breast; and, as further surgical operations appeared unadvisable, Mr. Irvine sent her to me. When I first saw her, on November 23rd, the cancerous cachexia was strongly marked. There was intense weakness and depression of spirits; the face bore an expression of agony; the complexion was sallow; there was complete loss of appetite, great wasting, restlessness at night, a pulse of 120, and sixty respirations in the minute. Towards evening, well marked febrile movements set in, and there was excruciating pain, more especially in the left shoulder.

Under these circumstances, no treatment could be expected to produce a decided change in the aspect of the case; but, as the patient and her friends were most anxious that something should be done, electrolysis was suggested. On November 30th, I introduced a needle connected with the cathode of Becker-Muirhead's battery into one of the cancerous nodes on the right side of the chest, and placed the anode to the left shoulder. The power of current was gradually raised from ten to thirty-five cells, and it was allowed to circulate for ten minutes. Immediately afterwards, the patient expressed herself as considerably relieved. I saw her again two days later, when she informed me that she had had less pain ever since, had slept better, and felt stronger and more cheerful. On December 14th, the cancerous node which had been electrolysed had disappeared, the tumour in the left breast was smaller, the pain was gone, the pulse had fallen to ninety beats, and the inspirations were only thirty-six in the minute. The patient said that she hardly felt any discomfort at all; looked wonderfully better, and entertained hopes of perfect recovery. During the intense frost which prevailed at that time, she caught a severe cold, which prevented her from coming to see me again, and she died on January 15th, 1875, from congestion of the lungs, but without a return of the pain. I should add that I also prescribed for this patient morphia, chloral, and quinine; but these remedies appeared to do little good, while, immediately after each electrolytic application, a decided change for the better took place.

I have now put before you as concisely as possible what I believe to be the advantages and limits of usefulness of the electrolytic treatment, and trust that you will henceforth use it more extensively in suitable cases than has hitherto been done.

USE OF PERCHLORIDE OF IRON IN *POST PARTUM* HÆMORRHAGE.

By LOMBE ATTHILL, M.D.,
Master of the Rotunda Lying-in Hospital, Dublin.

THE case recorded by Mr. Boddy, in which death followed almost instantaneously on the injection of a solution of the perchloride of iron, conveys a very important lesson. It is, as far as I am aware, the first recorded case in which there are just grounds for believing that death was due to the use of the styptic; but, even here, the cause of death remains doubtful, there not having been a *post mortem* examination, a matter greatly to be regretted. Mr. Boddy's conclusion that "without doubt death resulted from the action of the solution of iron upon the lining membrane of the uterus" is not, in my opinion, correct. First of all, the uterus has not, immediately after delivery, any "lining membrane" properly so-called; next, Dr. A. H. Ringland has, in several cases of *post partum* hæmorrhage recorded by him, carried the solid perchloride into the uterus and applied it direct to the interior of the uterus without producing any injurious results (*vide Proceedings of the Dublin Obstetrical Society*, session 1873-74).

I am not in a position to give an explanation of the cause of death in Mr. Boddy's case; but I believe it proved from Dr. A. H. Ringland's cases, in which he applied the solid perchloride to the inner surface of the uterus, and from my own (*Dublin Medical Journal*, April 1874), in which I injected a small quantity of a strong solution into the uterus, that the application of the styptic to the inner surface of the uterus is not *per se* a dangerous practice.

I would point out that in Mr. Boddy's case an unnecessarily large quantity of the styptic was injected; for, though "the hæmorrhage ceased immediately on the injection of the solution", the process was continued till the patient gave a shriek and died; and to this continuance of the injecting process after the purpose for which it had been employed was attained, the fatal result, in my opinion, is to be attributed,

which probably would not have occurred had but three or four ounces of a strong solution (one part of the strong liquor to two of water) been employed.

I think the profession are under a great obligation to Mr. Boddy for publishing this case.

THE TREATMENT OF SPINA BIFIDA.*

By JAMES MORTON, M.D.,
Surgeon to the Royal Infirmary, Glasgow; etc.

PREVIOUSLY to October 1871, it was the habit, with others as well as myself, to regard cases of spina bifida as hopeless, and to discountenance the idea of surgical interference. It was well known that they had been dealt with in a variety of ways, some of these reckless and rash, others more or less prudent, almost all proving in the end unfortunate. It was also known that in some few instances a spontaneous cure had taken place, but these were truly, like angels' visits, few and far between. It was universally admitted that very many died, in truth by far the greater number, the precise numerical proportion being difficult to arrive at; the conviction being general that only a very small percentage lived for any great length of time. As a proof of this, the prognosis usually given was a very hopeless one, and seldom falsified by the result.

So entirely had this view of the malformation taken possession of practitioners, that it was the custom to limit their efforts to what was called the palliative treatment, such as protection, or defence from injury, carried out in various ways, so as to avoid ulceration and bursting of the sac with its fatal ending. Up till the date mentioned, I was a follower of the do-nothing system; but, on October 2nd, 1871, a case was presented in the Glasgow Royal Infirmary, which prompted me to reconsider the question, more especially as the child was otherwise healthy, and I felt a strong desire to give it a chance. On turning my attention to the numerous methods previously employed, too numerous to mention here, it appeared to me that injection was the safest, as that could be effected without permitting the complete escape of the fluid contained in the protrusion. The kind of fluid to be injected next demanded consideration, when it occurred to me that a solution of iodine, less diffusible than either a spirituous or watery solution, would best suit my purpose, as being less likely to permeate the cerebrospinal fluid with rapidity, and, therefore, less likely to cause shock or bring on convulsions. With these views, I caused the following solution to be prepared, which is now known as the iodo-glycerine solution.

R. Iodi x gr.; potassii iodidi xxx gr.; glycerinæ j ʒ.

From half a drachm to two drachms of this fluid have been used, according to the size of the spinal protrusion.

Previously to injecting, I considered it prudent to make a tentative puncture, to ascertain whether such interference would be tolerated, and followed this course in the first case and most of the others. To close the openings made both by grooved needle and by trocar, collodion and flexible collodion have both been used, and have served the purpose, so that either may be employed. This mode of treatment was first employed by me in October 1871, and the details of the case are given in the abstract of a clinical lecture which appeared in the number of the BRITISH MEDICAL JOURNAL, dated April 6th, 1872, after having been shown to the members of the Glasgow Medico-Chirurgical Society on February 1st of that year.

The second case was shown to the same Society on May 30th, 1872, and was published in the JOURNAL named on June 15th succeeding.

Dr. J. R. Watt of Ayr successfully followed the same plan in two cases; one of which appeared in the BRITISH MEDICAL JOURNAL of April 26th, 1873, the other in that of January 31st, 1874, with a well executed photograph of the patient after cure.

Another case treated under my own care is published on October 24th, 1874, in the same JOURNAL. More recently a case has been successfully treated by Mr. Angus of Newcastle, which appeared in the JOURNAL for April 17th, 1875; and, in a private note with which he kindly favoured me, he expressed his confidence in the method employed if conducted with due care.

Since the beginning of this month (July 1875), I have treated another case with the like good fortune, and without a disagreeable symptom. The fluid was twice analysed by Professor Ferguson of Glasgow, but gave no indication of the presence of sugar.

During the past winter, a large cervical spina bifida was presented to me, which was several times injected without any appearance of

* Read in the Surgical Section at the Annual Meeting of the British Medical Association in Edinburgh, August 1875.