this operation. Although the results do not appear especially brilliant, the experience obtained by these cases would lead me to prefer resection to a more conservative operation which would not contemplate the removal of such portions of the joint as were not markedly the seat of disease, and would be confined chiefly to laying open sinuses and scraping the bone, or to more radical treatment by amputation.

A CASE OF BRIGHT'S DISEASE TREATED BY PILOCARPINE.¹

BY S. G. WEBBER, M. D.

JAMES O'N., aged thirty-five, entered the City Hospital January 4th. He had had varioloid, but no other fever. He had a fit two years ago when he was unconscious for two days, since which he was well till three weeks before entrance; then he retired Saturday night, and was not conscious again until the next Monday morning. His friends told him that he frothed at the mouth and kicked about. They were so assiduous in their care that they raised a large blister with mustard across the whole width of the back and about ten inches vertical length, and also by hot water or otherwise had produced a superficial ulceration about six by four inches on the right thigh, and a smaller one on the left ankle. He had no headache nor nausea. The face and legs were very œdematous, and a few days after admission he could scarcely see from swelling of the eyelids. There was a faint systolic murmur at the apex.

The urine was of high color, acid specific gravity 1013, contained about one fourth per cent. albumen; in the sediment were found hyaline casts, fine and coarse granular, epithelial and a few fatty casts, renal epithelium, some blood and pus, triple phosphates, and amorphous phosphates.

He received ten minims of digitalis, and the ulcers on the legs were dressed. He passed forty ounces or more urine daily. There was little or no change in his condition until January 10th, when he began to vomit, having considerable nausea and distress; and during the visit he had a convulsion, which was general, consisting in an exaggerated tremor rather than violent kicking. A third of a grain of nitrate of pilocarpine was given immediately, and soon after two drachms of brandy subcutaneously. He sweat freely, but the convulsions continued at intervals through the day, and he received a quarter of a grain of morphia once, and the pilocarpine was repeated at three and six P. M.

During the night he had several fits, but in the morning he said he felt comfortable, and the œdema was much diminished. On the 11th he received pilocarpine at ten A. M. and at noon. On the 12th he had it at two P. M. without much increase of sweat, but the urine increased in amount. On the 13th pilocarpine at noon, on the 14th at four P. M., on both occasions followed by free sweating, the amount of urine rising to seventy-six ounces. The last dose of pilocarpine was followed by slight vomiting.

On the 15th he had a convulsion at three P. M., which recurred at frequent intervals during the afternoon and night. Pilocarpine was given at 3.30 and at six P. M. The next day, 16th, at the visit the œdema was very much diminished, the man was insensible, bloody

froth was running out of his mouth, which had to be swabbed out; he seemed to be moribund. The pilocarpine was given in the morning and at six P. M. He had only a few fits during the afternoon and none during the night.

There were no more convulsions. The pilocarpine was administered twice a day on the 17th, 18th, 19th, and 20th; he recovered a fair share of intelligence, slept well, took and retained about twenty ounces of milk; had eggs by enemata; the œdema almost entirely disappeared. He had one dose of pilocarpine on the 21st, two on the 22d, one on the 23d, 24th, and 25th. On the last date the power of expectoration was lost, and he died soon after receiving the pilocarpine. At times the skin became dry and harsh, and the sweating after the pilocarpine was diminished, but after rubbing with oil, the skin acted again freely.

Mr. Elliot, the house officer, examined the sweat and found it to contain a very large amount of urea.

The kidneys were found to have undergone amyloid degeneration. One weighed thirteen ounces.

This case is interesting as showing the efficacy of pilocarpine to produce its peculiar effect in exciting the sweat glands during many days of continuous use. Also its value in checking the convulsions, in preventing their return, and in prolonging the patient's life. A large amount of urea was excreted through the skin, and so much water escaped thus that the œdema disappeared. Another point of interest is that although the urine increased to seventy-six ounces the convulsions recurred just then.

REPORT ON PROGRESS IN THERAPEUTICS.

BY FRANCIS H. WILLIAMS, M. D.

PILOCARPINE IN DIPHTHERIA.

SINCE the publication of an article by Dr. George Guttman on the use of pilocarpine in diphtheria, which was referred to in volume c., page 317, of this JOURNAL, there have been many trials of the drug.

Dr. Paynardeau¹ thinks that under pilocarpine the false membranes are detached earlier than usual, that membranes in inaccessible places may be detached and expelled by the aid of pilocarpine, and its use would be indicated when the danger is from the false membrane rather than from the diphtheritic poison. On the other hand, pilocarpine sometimes causes violent and persistent vomiting, diarrhœa, and especially prostration and collapse, which are the more formidable, since in diphtheria there is a tendency to syncope and cardiac weakness.

In the same journal Dr. Tayac says that the action of pilocarpine in diphtheria is prompt and energetic, and its administration is almost always followed by the elimination of the diphtheritic deposit, and oftentimes a general improvement in the condition of the patient. If administered from the beginning it may hinder the development of the disease. He considers that further trials are necessary.

Dehio, of St. Petersburg, uses instead of Guttman's prescription the following:—

Chlorhydrate pilocarpine	(Merk's) 0.05
Water	50
Sherry wine	50 M.
S. Ten grammes every two hours.	

¹ Read before the Boston Society for Medical Observation, February 6, 1882.

¹ Journal Thérapeutique, 1882. No. 7, p. 259.