tioning, constitute an unanswerable argument in favor of the operation.

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AN OPERATION FOR CATARACT.¹

BY EDWARD L. PARKS, M.D., BOSTON.

On the 14th of December, 1892, an Italian woman, thirty-five years old, was brought to my office by her brother. As she was nearly blind, she was led to a chair by my table. When asked if she could see me sitting before her, she replied that she could see only an indistinct form. I handed her my watch and asked her to tell me the time. With her right eye turned inward, the watch held closely to it on the other side of her nose, after a few minutes' study, she told me the time correctly.

A careful examination of both eyes was made. The right eye was undeveloped. In the left eye perception and projection of light were good. I diagnosed in the left eye a capsuloretaceous cataract. With Leiter's electric light I was unable to penetrate it or to discover how large a proportion was capsular and how large retaceous.

I talked to her substantially as follows: "It is a pity that a woman of your age should be blind. I will have nothing whatever to do with your right eye. I can do an operation on your left eye which will let in light, but I cannot promise that you will see. I will operate if you will give me authority to stop at any time and abandon the case, or to go on, as I choose."

Some days later her brother reported that she had liked the way I talked, and would like to have me operate immediately after Christmas. While thinking about the case, I received a specimen copy of a medical journal from Nashville, the leading article of which was by Landolt, of Paris, in whom I have the greatest confidence. His article was a discussion of the proper time to operate; but one of his conclusions was that you may operate at any time, provided you make a sufficiently large cut to remove the cataract. I determined to make a sufficiently large cut. At the same time I read the valuable contribution to "The American System of Surgery," by Thomson, of Philadelphia, and from it decided that the old-fashioned flap operation was best suited to this case.

At her home in Cambridge, assisted by her brother, who was not a medical man, I operated. She was laid upon an ironing board which rested upon two tables. I made a very large flap (*Lappenschnitt* of the Germans) and a large iridectomy. The anterior chamber immediately filled with blood, and, having told her that it would disappear in about a week, I left her.

The wound healed very quickly, but it was fully a month before the blood was absorbed. Thirty-seven

days after the first operation, I did the second. Another large cut was made near the margin of the corner inwards. Fluid vitreous escaped. The cataract was found to be more capsular than retaceous. The capsule was tense, like a tightly stretched drum-head, and it parted readily, as if by magic, at the touch of the cystotome, leaving a clear, round pupil.

Forty-four hours after the operation the eye was opened and seen with dim light. The seventh day eye quiet. The eighth day cut perfectly healed. The seventeenth day saw well. To make a long story short, there was a steady improvement in the sight from this time onward.

The first operation was done December 26th, the second the 1st of February. April 8th, vision was $\frac{1}{6}$. May 6th, ordered plus 10 D. for near work. June 29th, with plus $5\frac{1}{2}$ D., vision equalled $\frac{1}{6}$.

In the summer of 1899 I met her in a bicycle suit. I asked her if she rode the bicycle. She said that she did, with her husband or her brother to accompany her. As she had ridden through Boylston Street in the afternoon, when most of the heavy teaming is done, she must have felt pretty confident.

February 14, 1900. Now without glass reads the newspapers. Vision $\frac{1}{6}$. She prefers 4 to $5\frac{1}{2}$ D. for distance.

She said that she "had consulted all the great specialists in Europe, and they all said that she would become totally blind and advised her to let it alone." At the time I saw her, her relatives in Italy were writing to her not to let any doctor touch her eyes.

REMARKS UPON SPINAL COCAINIZATION SUGGESTED BY CASES SEEN AT TUFFIER'S CLINIC IN PARIS, AUGUST, 1900.

BY MAURICE H. RICHARDSON, M.D., BOSTON.

At M. Tuffier's clinic at 10 A.M., one day in August, 1900, fifteen or twenty representative surgeons were present, among whom were Warren, Weir, Dennis, Murphy, Cushing, Mayo, Ochsner, Laplace and other Americans. The first patient was a woman of middle age, with a large abdominal tumor. She was seated upon the operating table, bending forward. The skin over the lumbar region was sterilized by scrubbing with soap and water, and later with an antiseptic, the nature of which I do not remember. A small, hollow needle about 3 inches in length was next inserted carefully into the spinal canal through a space to the right of the lumbar spine. The needle was slowly thrust in until thin fluid, slightly tinged with blood, escaped. The syringe, a small one, was then attached to the needle and the solution of cocaine was slowly introduced under gentle pressure. The place of introducing the needle, the amount and strength of the solution, are immaterial. I do not recall exactly these points, which, for purposes of this communication, are, as I say, unessential. The immediate effect of the procedure was not noticeable. There was no outcry and no visible effect upon the patient. She was at once placed recumbent and her abdomen sterilized. In the meantime M. Tuffier prepared himself. At the end of about ten minutes — perhaps less — with the patient in the horizontal position, two large ovarian cysts were removed, and the incision closed. At this time I had an opportunity of examining the pulse. It was barely perceptible; its rate was between

¹ Read before the Boston Society for Medical Improvement, December 10, 1900.

60 and 70. The face was pale, the expression anxious. During the whole operation there was no outcry, no struggling, no restlessness. In answer to repeated questions there was the invariable reply that there was no pain whatever. The operation lasted about twenty minutes and was skillfully performed. As a demonstration of complete anesthesia it was a brilliant success. As a whole, the operation and the operator impressed me—and I think, all present—most favorably. Nothing could be more satisfactory than this demonstration of the efficacy of the method of anesthesia.

The second patient was a woman of from thirty to thirty-five with a tumor of the left kidney. Cocaine was injected as in the previous case, with the same success. The patient said that she felt paralyzed. The operation was much more difficult than the other, but was brilliantly accomplished. The patient repeatedly answered that she felt no pain. She was, as I remember it, nauseated at or before the close of the operation. This was said to be a not unusual occurrence. The pulse was extremely feeble, but not accelerated. The face was pale, the expression anxious. M. Tuffier said that it was not unusual for the temperature to rise several degrees after the operation, but that it quickly subsided.

The impression made upon me at the time was great. The method of administration was quick and sure. The spinal canal was at once entered without greater suffering than would naturally be caused by the deep insertion of a small needle. There was no hemorrhage, or not more than enough to reddens slightly the cerebrospinal fluid. The rapidity and efficiency of the anesthesia were remarkable. The great abdominal operations were admirably borne; and yet the whole impression was distinctly unfavorable to this method of anesthesia. The patients appeared in actual danger. The facial expression, the pallor, the pulse, were not unlike those of a patient in deep shock. Such an appearance I have seen, and would perhaps expect after the removal of a renal tumor filling the left side of the abdomen, however mild and successful the anesthetic. I should not expect it after the removal of uncomplicated ovarian cysts under ether anesthesia. The condition would indicate the hypodermic or the intravenous infusion of normal salt solution, or at least of brisk stimulation and artificial heat.

On the other hand, the appearance of these patients I have seen in simple faintness, not resulting necessarily from pain, but from mental shock, or even from the sight of blood. The pulse and expression may have been owing simply to the realization and horror of what was going on.

The advantages of spinal over general anesthesia, however great it may be under certain circumstances, cannot be demonstrated except by years of observation and by thousands of experiments. I do not feel at all convinced that this method is without serious dangers. Time alone will show what and how great these dangers are. There are, it seems to me, definite indications for the adoption of the method—indications which will permit its adoption by even the most conservative. This limited field may, if increased knowledge proves safety, gradually become widened.

From the anatomical point of view, however, it is inconceivable that the introduction of the needle into the spinal canal can be without danger, especially if

the method is practised by every one. I recall the great plexuses of veins which surround the vertebræ and the dura mater of the cord, as I have demonstrated them many times by solidifying injections. The cauda equina, too, cannot but be liable to puncture or other injury by the introduction of the needle. Indeed, one of the Americans present told me that a patient of his suffered for several months from paralysis of the bladder after this method of anesthesia.

The extent and gravity of the danger can be known only by repeated use. Judging from the occasional effects upon the heart produced by subcutaneous injections of cocaine, there must be some danger at least of cardiac depression when the solution is intradural. The dangers from the subcutaneous use of cocaine are apparently slight, however. I have seen but 1 case in which there was cause for the least anxiety. The patient received a urethral injection of 4% solution of cocaine preparatory to the introduction of a sound. He became suddenly collapsed; the pulse was feeble, the face pale, the respiration sighing. His general appearance was not unlike that of M. Tuffier's patient. Under stimulation the disagreeable symptoms disappeared.

Finally, there is the danger of introducing sepsis into the spinal canal through the needle. In skilled hands this danger is so slight, however, that I should not object to spinal cocainization on such grounds. The chief objection, after all, lies in the fact that a drug, the dangers of which are not fully known, is introduced into the spinal canal, whence it cannot possibly be removed, and where it must be left to work out its peculiar effects, however beneficial or however injurious these effects may be.

A feature of general anesthesia which is too little appreciated—which is, indeed, often forgotten, but which is one of its chief advantages—is that blessed oblivion which envelops the patient from the beginning to the end of the operation. He loses consciousness in his own bed; he wakes there; he escapes all those horrors of the operation which the imagination can depict and fear inspire.

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THE PURULENT RHINITIS OF CHILDREN AS A SOURCE OF INFECTION IN CERVICAL ADENITIS.¹

BY CAROLUS M. COBB, M.D., BOSTON, MASS.

MARY E. B., age five years; was brought to my clinic at the Lynn Hospital July 13, 1900, with enlarged glands on both sides of the neck, just below the angle of the jaw. The mother said that she had noticed the enlargement for about ten days and immediately following an acute coryza. The family history was good, none of the near relatives having had tuberculosis in any form. The throat was free from inflammation, and the tonsils were not enlarged or diseased, but the mucous membrane of the nasal chambers was covered with a dried mucopurulent secretion.

The history of the case is as follows: The child was free from disease of the upper respiratory tract

¹ Read before the Essex South Branch of the Massachusetts Medical Society, December 21, 1900.