soon, however, abandoned the latter, or vertical, division of the capsule; and he now simply incises the capsule in a position exactly corresponding to the corneal section. He lays great stress on the importance of the division being a *cut*, and not a *tear*; and, in order to effect this, he makes use of very sharp cystotomes, whose straight cutting edges form an angle of 120° to 150° with the stem. During the division of the capsule, slight pressure must be made with the traction-forceps, so as to cause the corneal wound to gape somewhat. By this means, the division is effected without the necessity of entering the cystotome into the anterior chamber.

Knapp alludes to the fact that von Gräfe had, from the beginning, laid stress on the importance of horizontal division of the capsule, to insure an easy expulsion of the lens; and Arlt draws attention to the same point, in his Section on Operations on the Eye, in von Gräfe and Sämisch's *Handbook*. In the discussion which took place at the Heidelberg meeting, Professor Dor spoke of having seen Guguet of Lyons perform this operation, and also stated that he himself had done it. This does not, however, appear to me to invalidate Knapp's claim to priority in the matter, as he is clearly the first who "has confined himself to the horizontal section as a general method", studied it from a scientific stand-point, demonstrated its advantages, and described the proper manner of performing it.

From Knapp's observations it would seem that, after the lens has been removed by this method, the wound in the capsule closes in a few hours, and any remnants of the cataract lie shut up in the bag—in fact, out of harm's way; and thus, one of the greatest dangers attending the operation is eliminated. One of the most remarkable features about the cases, however, is the almost total absence of any irritation after the operation. This was strikingly demonstrated in all the cases I saw in Dr. Knapp's Hospital last year, on the occasion of my visit to New York; and I have observed the same in nearly all the cases I have since operated on myself. With the exception of a slight conjunctival injection, one would find it hard to believe on the following day that any operation had been performed upon the eye.

As regards the results; at the time when Knapp made his communication at Heidelberg, he had performed forty-three operations by this method; and of these he had lost four, but they were all complicated cases. The medium result as regards visual acuteness was between $\frac{2}{3}$ and $\frac{3}{4}$.

The disadvantage of the operation, and the only one I believe which can be urged against it, is, that it is generally necessary to perform a secondary operation on the capsule a few weeks later; but this is attended with no trouble; and, as an argument against the proceeding, has little force when weighed against the increased safety of the operation itself.

The number of times I have performed the operation—twenty-seven in all—is, of course, too small to draw any definite conclusion from; but, taken in conjunction with Dr. Knapp's results, coupled with the fact that I have not lost one of them, and that the healing in all of them has gone on smoothly, they justify me in looking upon it as significant. I am not in a position to give the visual results in these cases, because some of them have not yet been accurately tested, nor have all of them, though needing it, undergone the secondary operation on the capsule; the average was about $\frac{2}{3}$.

On thinking over the subject lately, it occurred to me that if this method really eliminates the chief danger from the operation, it ought to be quite possible to remove a cataract, before it had reached maturity, with perfect safety. Accordingly, I extracted such a cataract on Friday last, at the Richmond Hospital. The operation went very well, and on Monday last, when I saw the patient, the eye looked quite quiet and he had no pain. I need scarcely say that, if this proceeding prove to be one which can be undertaken with safety, it will be an immense boon to those who are afflicted with incipient cataract. I ought to mention that I and my colleague (Mr. Swanzy) always perform von Gräfe's linear peripheral extraction, and that we instil eserine both before and after the operation, as recommended by De Wecker.

On Sunday last, I received a letter from Dr. Knapp, to whom I had written some short time ago. He says: "I am delighted with the good account you give of your last eighteen extractions. I, too, can say that, since last November, I have not had any reverses. Much depends on the delicacy of the operation; but I feel somewhat hopeful that, with good instruments and correct performance of every step, extraction can be made almost as safe an operation as iridectomy. I send you, simultaneously with this letter, a paper, which has perhaps already reached you, published in the second number of the eighth volume of the *Archives of Ophthalmology*. You will find in it a detailed account of my latest experience in cataract extractions. I have done the peripheral division of the capsule for almost two years, in all cases (about seventy-five); and am the more satisfied with it the longer I

practise it. There has been no iritis, no capsulitis, no cyclitis—certainly a very pleasing and comforting result."

I regret to say the paper Dr. Knapp alludes to has not come to hand, nor have I yet received the second part of the eighth volume of the *Archives*.

The advantages of this method may, I think, be briefly summed up as follows: 1. Simplicity of the operative procedure; 2. Less liability of doing injury than by the ordinary method; 3. Exit of the lens rendered easier; 4. Whatever portions of the cortical substances remain behind are, from the rapid healing of the wound, kept within a closed cavity, so that the conditions of the eye are practically the same as those which follow simple iridectomy.

CASE OF LATERAL CURVATURE OF THE SPINE DEPENDING UPON UNILATERAL PLEURO- PNEUMONIA.

By DAVID DRUMMOND, M.A., M.D.,

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R. G., AGED 10, a somewhat delicate, though moderately well nourished girl, was brought to the Children's Hospital in the beginning of August by her mother, who gave the following history of her child's illness. A month previously, she was laid up with cough and pain in the left side, extreme prostration, slight difficulty in breathing, and some fever. For this attack, she was kept in bed for ten days and attended to by a medical man. It then being deemed inexpedient to retain her longer in bed, she was allowed to go about, when it became apparent to her mother, on bathing her, that the right shoulder was higher than the left, and the spine was "bent to the right side". At this time, she still complained of some pain in the left side, and of cough.

Some days were allowed to elapse before it was decided to consult some one for the deformity, the original attendant having given up the case; eventually, the child was brought to a professional man, who recommended the case to the Children's Hospital, on account of the inability of the parents to pay for the necessary instruments to give support to the spine. When she was undressed, the deformity at once became apparent; the right shoulder was higher than the left, the posterior border of the scapula being tilted out from the ribs, presenting a "winged" appearance. The spinal column was markedly curved (convexity) to the right side in the upper dorsal region, with the usual compensatory curve to the left in the dorso-lumbar, the lower ribs on the left side being flattened and thrust somewhat forward, evidently due to the rotation of the bodies of the dorso-lumbar vertebrae to the right. Physical examination of the chest revealed a consolidated left lung, as evinced by marked dulness on percussion, increased vocal resonance, and fine crepitus somewhat masked by the presence of tubular breathing. The child was ordered cod-liver oil and Parrish's syrup, and the spine to be rubbed and sponged with salt water.

When seen a fortnight afterwards, the spine was quite straight, the most careful examination by inking the spinous processes failing to elicit the slightest degree of curvature. No other treatment but that recommended (above) had been attempted. The lung was nearly normal, air passing in freely, and there was no dulness on percussion, with a total freedom from pain.

REMARKS.—Without entering at length into the various theories which have been advanced as to the causation of lateral curvature, I would only remark that it seems now to be the fashion to ignore, at all events to a great extent, the muscular theory of Dr. Dods and M. Guérin, and in place to ascribe every case to the purely mechanical explanation. The case I have here briefly recorded is surely one in which pain played an important part in the production of the spinal curvature, for with a complete relief of the pleuritic pain the spine became straight in a very few days. The side being fixed to avoid as much as possible the friction of the inflamed pleura by what Mr. Hilton, in his *Rest and Pain*, terms "Nature's own process", an opportunity is consequently afforded the muscles attached to the vertebrae to rotate the same; for, as Mr. Adams shows in his classical work on the *Pathology and Treatment of Lateral and other Forms of Curvature of the Spine*, rotation precedes any lateral deviation of the spinal column.

Presuming, then, there is something in the "muscular theory", may we not have here a partial explanation of the vexed questions: 1. Why is the dorsal convexity nearly always to the right? 2. Why does lateral curvature occur so much more frequently in girls than in boys? May the inframammary pain of delicate girls, which is nearly always on the left side, and often severe, not have something to do in bringing about lateral curvature where there already exists predisposing causes, acting in a slower, but none the less sure, way than in the case recorded above?