Clinical lecture on the radical cure of hernia : with a case / by George Buchanan.

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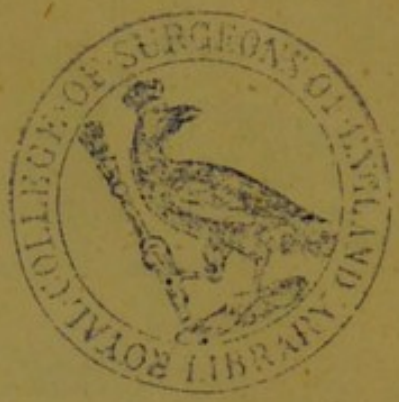

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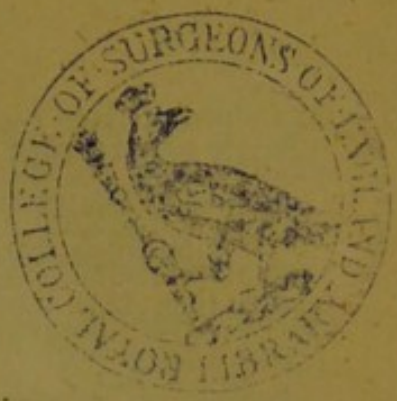

CLINICAL LECTURE

ON THE

RADICAL CURE OF HERNIA;

WITH A CASE.*

BY

DR GEORGE BUCHANAN M,A., M.D.,

Professor of Clinical Surgery in the University of Glasgow.

THE operation for the radical cure of reducible inguinal hernia is not one which is likely to be often performed by the ordinary practitioner of medicine; it belongs rather to the domain of the surgeon. The condition for which it is performed, is one which causes discomfort and trouble, but is not the source of immediate danger. The subjects of it are not likely to know anything about the operation, or even to have heard of it, but they are constantly referring to their medical attendants in consequence of inconvenience arising out of ill-fitting trusses and other annoyances inseparably connected with the affection. When any case comes under the observation of the surgeon either in hospital or private practice, it is almost certain to have been previously brought under the notice of the general practitioner—so that in the first instance it rests with him to recommend his patient to undergo the operation. If by describing to you the nature of the operation, giving you an example, and stating the results of my own experience, I can show that it can be undertaken

* NOTE.—This is a condensed summary of the Lecture.

with safety and success, I hope that the operation will soon be more generally had recourse to than hitherto.

Although reducible hernia is not a source of immediate danger, the unfortunate subject carries about with him a condition which at any moment may become so, and the case before us may serve as a very striking illustration.

James M., aged 37, ship-rigger, was admitted to the Western Infirmary on the 24th of Sept., 1877, with a simple fracture of the thigh in the middle of its lower third. The limb was put up in the long splint, and the progress toward recovery was uninterrupted, so that at the end of five weeks union had taken place. At this time a starch bandage was applied, in order to allow the patient to walk about the ward for a few days before dismissal. On the 12th November, after walking about, he was getting into bed, when the exertion caused the descent of a hernia of which he had not mentioned the existence before. Being foiled in several attempts to return it, he mentioned it to the nurse who at once sent for the house-surgeon. The hernia was on the right side, distending the scrotum to the size of a closed fist. Taxis was tried, first without, then with chloroform, but, after twenty minutes pretty powerful pressure, it failed in effecting reduction. The house-surgeon then sent for me. I arrived about three hours after the hernia had come down. In the interval between the trial of taxis and my arrival, the patient got sick and vomited, and lay on his back a good deal exhausted and depressed. While so lying he laid the weight of his hand on the tumour and with a little manipulation it slipped up.

The man now tells us, (19th Nov.,) that sixteen years ago while raising a heavy bag to his back, he felt something give way in his right groin, and found that a protrusion had taken place—which has recurred every now and then, and is inefficiently retained by a belt: in fact he has a reducible inguinal hernia. On examining the canal I find I can push my finger easily through the external inguinal ring up to the very top of the canal, and the least attempt to cough causes a protrusion from the abdomen.

The recent protrusion, which was attended with considerable pain, and was very nearly accompanied by strangulation, has widened considerably both the canal and rings, and so has made the hernia more easily protruded than before. The patient has got a fright, and feels that he is daily running the risk of his complaint becoming dangerous and even fatal—so that he has no hesitation in submitting to the operation for its radical cure.

[The operation was performed in presence of the students on the 19th November. The steps of the operation, and the principles on which it is founded, were explained. To make it intelligible it is necessary to revise shortly, and point out, on a pelvis, the exact position and attachments of the external oblique aponeurosis, Poupart's ligament, the lower border of the internal oblique and transversalis muscles, the conjoined tendon, and the situation and boundaries of the two abdominal rings, as well as the relations of the spermatic cord, and the deep epigastric artery. These anatomical details are omitted here.]

The operation is as follows: The patient lying on his back with the knee slightly bent and raised, is put completely under the influence of chloroform. An incision an inch and a half long is made obliquely across the scrotum about three inches below the external ring. This incision divides the skin and dartos alone. After a few touches of the knife,—the finger nail, and then the handle of the knife, can be used to separate the skin and dartos from the hernia, sac and its denser coverings (which for convenience I shall call the *sac*). This separation is to be made all around the incision to the extent of a five shilling piece or more, according to the size of the tumour. The point of the forefinger is now to be put through the incision, against the lowest part of the sac, and, by a gentle shaking and pushing motion, is made to invaginate the sac, (without the skin,) up through the external ring into the inguinal canal, as far up as the internal ring. The finger is now lying in the canal in front of the cord. The tip of the forefinger is now shifted underneath the inner pillar of the external oblique aponeurosis

and by a little manipulation can hook forward below that aponeurosis, the lower edge of the internal oblique just where it ends in the conjoined tendon. This can readily be felt as a prominent ridge against the external aponeurosis. While the tip of the finger is retaining the parts in the position above described, the surgeon takes in his other hand a very strong curved needle with an eye-hole near the point, and fixed in a strong handle. An assistant has near at hand about two-feet of thick, strong, pliant silver wire bent double, so that the two ends are together, about half an inch of each end being bent into a hook.

The curved needle, well oiled, is now entered at the scrotal incision, slipped along the inner edge of the forefinger as far as its tip—that is the edge nearest the umbilicus—and is made to pierce the conjoined tendon, also the internal pillar, so that its point projects below the skin not far from the situation of the internal ring. The skin is now slipped over the subjacent structures as far as it can be drawn towards the umbilicus and the needle point thrust through it. One of the hooked ends of the silver wire is now put through the hole near the needle point, and by a rapid motion the needle and wire are drawn down along the edge of the forefinger and out of the scrotal incision. The needle is again entered as before and passed along the outer edge of the forefinger, and by it guided underneath the outer pillar of the external ring as far up as the former puncture. The needle is now made to pierce the aponeurosis near Poupart's ligament, and its point rests against the skin, raising it up. The skin is pulled downwards and outwards, till the former puncture is opposite the point of the needle, which is then pushed through it. The other hooked end of the wire is put through the needle's eye, and by it pulled down the canal and brought out at the scrotal incision.

The next step is to pinch up the sac from off the cord, at the situation of the external ring, with the forefinger and thumb. The unarmed needle is now put in at the scrotal incision and passed through the sac, across the cord, below the edge of the internal pillar through which it is thrust, and made to

project at the inner angle of the scrotal incision when it is pulled upwards to be opposite the needle point. The hooked end of the wire which was first drawn down is now put through the needle's eye, and by it drawn out at the point where the needle was inserted. An assistant puts his finger into the loop of wire which remains protruding from the hole in the skin of the groin, which was made by the punctures, and holds it fast, while the operator takes the ends hanging out of the incision in the scrotum and pulling them firmly straightens the wires as they lie in the canal. This stretching, done with some force, draws the two sides of the canal together, so that the external ring is tightened till it grasps the cord. The inclusion of the conjoined tendon, or lower border of the internal oblique, in the grasp of the wire, secures that all the boundaries of the canal are drawn closer.

The two ends of the wire in the scrotal incision are twisted firmly together up into the canal, and the loop at the groin is twisted down into the puncture, in each case three turns in the same direction being given to the wires. By this the sides of the canal are still further approximated, and part of the tissue entangled in the twist of the wires.

The loop of the wire is now bent down to the skin, and the wires with the two free ends bent up and passed through the loop and secured; pressure of the wires on the skin being prevented by a pad of lint. A little oiled lint is placed on the scrotal incision, a pad of lint and compress, retained by a bandage, completes the dressing.

The patient is removed to bed and ordered to have an injection of 60 drops of laudanum in about an hour, to be repeated at 10 p.m., and continued nightly for six or eight days.

Remarks and Sequel.—The operation was contrived in 1861, by Mr John Wood, Professor of Clinical Surgery in King's College, London; and the steps of the proceeding here described are those which were exhibited to my students on the 19th November.

The patient was kept lying on his back for ten days: the

bowels were kept from acting by laudanum enemata; and the food ordered was concentrated and nourishing, principally beef steak and toast, and a glass of port wine.

After ten days the wires were removed, and the inguinal canal was found to be occupied by a firm plug, which quite filled it up. In a few days the apertures where the wires were drawn out were closed up.

At present (22d Dec.) the valvular condition of the inguinal canal is completely restored, the sides being approximated, any interval being obliterated by the fibrous matter which had been formed where the wires lay; the bowels are acting naturally, and the patient takes the ordinary diet of the hospital. When he makes any attempt to cough the impetus is seen to affect the lower abdominal wall on both sides equally. There is no bulging or other indication of the former seat of the hernia.

From a perusal of Professor Wood's statistics, which include the practice of himself and several other surgeons, from the character of the operation, and from my own observation, I think, as a remedial measure attended with safety and success, it ought to be more generally had recourse to; at all events, when the wearing of a truss causes much annoyance, and where the truss inefficiently performs the service for which it is worn.

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