

ART. VII.—*The Radical Cure of Inguinal Hernia.*^a By JOHN K. BARTON, F.R.C.S. ; Ex-President of the Royal College of Surgeons ; Surgeon to the Adelaide Hospital, &c.

THE great advantages to be obtained in cases of hernia, by a radical cure, over the palliative treatment by a truss, must have forcibly presented themselves to the minds of surgeons since the time when this disease was first understood ; but, although various operations were devised and performed by Girdy, Sigorini, and others, it was not until Wützer of Bonn, in 1838, published a description of his operation that the attention of surgeons generally was directed to this subject.

The verdict which time has pronounced upon Wützer's operation is unfavourable, and the same may be said of Agnew's modification of it, which may account for the opinion expressed by that distinguished author and surgeon, who, after he has described all the various operations yet practised for the radical cure of hernia, writes thus :—"Not one can be said to be satisfactory ; and it is a question admitting of grave doubt whether, in the present state of our knowledge on the subject, the surgeon is justified in resorting to any other treatment than that by a properly-adjusted truss." Professor Wood, of King's College, London, has shown by the success which has followed his method of operating in his own hands, that this in his case, at all events, is not true, as his percentage of deaths, in a very large number of cases, is between one and two per cent., while he reports three-fourths of his cases as permanently cured. He informs us that constant application is made to him by persons seeking employment in the public service, and by others who purpose proceeding to India or elsewhere, to have his operation performed, and that he now performs it for all such—if they are in good general health—without fear of ill effect and with confidence as to the result. Wood's operation is a clever combination of the plan of invagination with direct closure of the internal ring, and it is chiefly upon this latter that its success depends. If any part of the inguinal canal be left open, the hernia will descend, so far as it is open, through it, and when it has done so, it will form the thin edge of a wedge, which will, in time, press down and overcome any obstacle which invaginated fascia or skin may present, and thus reproduce the hernial protrusion ; but, if the

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internal ring be completely and permanently closed, this cannot take place. If this reasoning be true, it follows that Wood's operation may, with advantage, be simplified by omitting the invagination part and taking care that the closure of the ring be really accomplished. This, by his subcutaneous method of operating, cannot be done satisfactorily, at least by hands less practised than his own, and therefore, if the radical cure of inguinal hernia is to be practised by surgeons everywhere, it becomes necessary to institute for Wood's method of operating one at once more simple and more sure. This is found in the *direct method*. Prof. Gross of Philadelphia thus describes this operation as practised by him :—“The most rational radical treatment of hernia is undoubtedly the direct, as it may be termed, consisting in cutting down upon the parts, refreshing the edges of the opening of descent, and approximating them with wire sutures, retained either permanently or until complete consolidation has been effected. The operation, it will be perceived, is founded upon the same principle as that for hare-lip and cleft palate, and will, if properly executed, be much more likely to answer the purpose than the process of invagination, now so much in vogue, and for the most part so worthless.”*

Professor Gross had, when writing this, performed this operation twice, and with encouraging success. The special features of this operation are :—First, it is open ; the surgeon sees exactly what he is doing, and can, with certainty and precision, draw the pillars of the ring into close contact. Secondly, it closes the opening through which the hernia descends at its abdominal aperture, and not in the canal. Both of these are important points which recommend the operation as one likely to fulfil the requirements of the case ; and if we can add from experience, that it is at once safe and permanently successful, then we have all we can desire in the way of an operation for the radical cure of inguinal hernia.

I now relate to the Academy the particulars of three cases operated upon by me by this method, with the difference from that described by Professor Gross, that in no case did I refresh the edges of the ring, but simply drew them into close contact by strong silver wire, which in one case only was removed, and may, I believe as a rule, be left in with decided advantage :—

CASE I.—A fine little boy, aged between two and three years, was brought to me in April, 1882, from Newtownbutler, Co. Fermanagh, with

* Gross, Surgery. Vol. XVII., p. 513.

a note from Dr. Fitzgerald, asking me to see if anything could be done for a large inguinal hernia on the right side, which he had failed to keep up by any means, having in vain tried to do so with a variety of trusses.

Upon examination I found a large scrotal hernia, nearly the size of the child's head, on the right side; it could be reduced after some manipulation, but the ring was so wide that it was impossible to keep it up when the child cried or coughed; trusses had been abandoned as useless.

The child was a remarkably fine vigorous boy, one of twins; the birth was difficult and prolonged, and when, at last, this child was born, the nurse noticed the hernial protrusion; it had probably been produced during the birth.

Upon the 15th of April, 1882, a few days after his admission, the note taken by the dresser states that when the child was crying the hernia descended almost to his knees.

Upon the 18th of April I performed the operation with every Listerian precaution. An incision, two inches in length, was made obliquely from above downwards and inwards, its upper extremity corresponding to the internal ring; the fascia was carefully divided upon a director, and when the internal ring was reached the index finger of the left hand was introduced into it, so as completely to prevent the descent of the hernia, and, at the same time, to regulate the next step, which was the introduction of the wire suture; and for the remainder of the operation the finger maintained this position. A curved needle, with the eye close to the point, was then passed through the inner pillar of the ring (care being taken not to introduce it too near its free edge), and, guided by the left forefinger, was safely carried across the ring and through the outer pillar from behind forwards; a strong silver wire was then passed through the eye, and the needle was withdrawn; thus the first wire stitch was introduced, and similarly a second—only two were placed in this case—the finger was then withdrawn, and the wire was tightened, drawing the sides of the ring into close contact. When firmly secured by twisting, the cut ends were carefully bent down so as to lie in the axis of the wound, and not project either forwards or backwards. Drainage was provided for by a few catgut threads, the wound was then closed, and dressed with protective and gauze; three drops of liq. opii sed. was administered, and the child removed to bed; the temperature was 100·5° in the evening.

19th.—Morning temperature, 99·8°; evening temperature, 100·4°.

20th.—Morning temperature, 99°; evening temperature, 100°. The wound dressed antiseptically; looked very well; bowels moved twice.

21st.—Morning temperature, 100·2°; evening temperature, 101°.

22nd.—Wound dressed; a little pus was found; scrotum was swollen on right side; morning temperature, 100·2°; evening temperature, 100·2°.

25th.—Morning temperature, 98·6°; wound rather open.

The wound slowly granulated, and on the 15th of May had almost quite healed, but would not completely heal. Evidently the wire was keeping it open, but I refrained from any interference with the wire. The child was allowed up on May 26th, when the hernia came down a little. He was then confined to bed, and a month passed, during which, although he was always jumping about, and continually shouting, and frequently crying, no protrusion took place. Early in July the wound became inflamed, and opened, and I then thought it best to remove one wire stitch, the twisted end of which was found projecting in the wound. After this the wound healed soundly. I then had a light truss made upon the plan of L'Estrange's, and allowed the child up. No further protrusion took place, and he left hospital and returned to the country, where, as I was informed, he remained well, and able to wear the truss. Quite recently, however, I have had a letter from Dr. Fitzgerald, in which he tells me that the operation has not proved a success, as the hernia has returned, and now descends into the scrotum, but whether it is capable of being held up by a truss or not he does not say.

CASE II.—Mr. K., aged twenty, a remarkably muscular and healthy young man, came to me in the month of July, 1883, stating that, being desirous of obtaining a commission in the army, he had prepared himself for the examination, but previous to his admission to which he was submitted to a physical examination, when a small hernia was discovered, of the existence of which he was ignorant before, and he was told he could not be received. He was informed, however, by Surgeon-General M'Kinnon, that if the hernia was radically cured he would pass him. Under these circumstances he applied to me, and I did not hesitate to recommend him to undergo the direct operation. The hernia being a small, reducible, left inguinal one, and the patient being in splendid health, and a teetotaller, the operation was performed upon the 31st of July last; two strong silver wire sutures were introduced. He suffered rather severe pain in the abdomen for two or three days, but his temperature did not rise above 99° ; the pain was relieved by hot poultices externally, and half a grain of opium three times a day internally. The wound had completely healed on the 20th of August, after which he was allowed up with a light truss on.

I did not see the patient at this time, as I had left town for a holiday, but when I returned in September he called on me to say that a few days after I last saw him a slight protrusion had taken place below the situation of the sutures, and that whenever he took off the truss the hernia appeared there. Upon examination I found that it was so, and I con-

cluded that two stitches were insufficient in this case, and must be supplemented by another, or, perhaps, two more. The patient was anxious to have the operation completed as soon as possible—so on the 27th of September a second operation was performed; the lower wire, inserted at the first operation, was found and another put in close to it, and a second at a little distance further down. When these were tightened the opening was most securely closed, but the aperture left for the cord was so small that I feared some inconvenience might follow—but, anxious to secure the success of the operation, I left it as it was.

The case was throughout dressed with Listerian antiseptic dressings. A rather smart swelling of the testicle and scrotum followed the second operation, but in twenty-four hours this began to subside, and had disappeared in three days, after which he progressed steadily. On the 9th of October antiseptic dressings were laid aside—the wound being healed—except in two little spots about the size of a split pea, where a drop or two of pus formed daily. He was kept in bed for a month, then allowed up with a truss, which was gradually laid aside until he went up again for examination at Sandhurst, which he did in the beginning of last month (Dec., 1883). Surgeon-General M'Kinnon carefully examined him, and passed him, pronouncing the cure satisfactory, and expressing his opinion that the open or direct operation which had been performed was the right one in such cases.

CASE III.—T. B., three years old, was brought to the Adelaide Hospital on the 10th of December, 1883. I had seen him a few days previously at my own house, where his mother had brought him for my opinion regarding a large inguinal hernia on the right side. The history of the case was to the effect that when ten months old he fell out of his mother's bed, and shortly afterwards a swelling was noticed in his right groin, which was made worse by coughing and crying. This swelling steadily increased in size, but rapidly enlarged when the child took whooping cough. About six months ago, upon examination, an oblique inguinal hernia, reducible, and the size of an orange, was found on the right side. When the hernia was reduced, which was readily accomplished, the ring was easily felt, and admitted the tip of the index finger of the right hand. Various trusses had been tried in vain. The child frequently suffered sharp pain in the abdomen when the hernia was down.

Upon the following day, the 11th of December, I operated by the method already described, and closed the internal ring with two silver wire sutures—Listerian precautions being used, the wound being dressed with salicylic wool and carbolic gauze. The evening temperature was 101·2°, and the pulse 136, which was the highest point reached during the subsequent progress of the case. The wound did not ~~unite~~ by

first intention, but granulated, and now, just a month from the date of the operation, the members can judge of the amount of closure which has been effected, the child being in attendance for examination.*

The three cases now recorded show, in my opinion, that the direct operation for the radical cure of inguinal hernia is a safe one when due precautions are taken; further, that it is one easily performed; and finally, the failure of the first case proves to me that it is necessary in a bad case, and probably better, if not absolutely necessary, in all cases, that the wire sutures should be left in to form a permanent tie and firm barrier against the hernial protrusion. The main question as to the permanence of cure effected by this operation must be decided by time, and will be much facilitated by a full and faithful record of all cases, whatever the amount of success or failure which is attained, being given by all those who operate. This I will do, and, other members doing the same, we may hope in a short time to have in the Transactions of the Academy such a record as will decide the question as to whether we have or have not in the direct operation the true radical cure of inguinal hernia. In conclusion, I submit for your inspection a curved needle, by means of which I have found the introduction of the wire sutures much facilitated.

ART. VIII.—*The Climatic Treatment of Phthisis.*^b By JAMES ALEX. LINDSAY, M.A., M.D.; Physician to the Ulster Hospital, Belfast; Assist.-Physician to the Belfast Royal Hospital.

MY only excuse for bringing so hackneyed a subject under notice is the fact that I have had a more extensive personal acquaintance with foreign sanatoria for phthisis than falls to the common lot. Circumstances have enabled me to travel widely, and amongst other places I have visited Southern France, Switzerland, Italy, Algeria, Cape Colony, Australia, New Zealand, and California—thus including all the most famous health-stations, with the exception of Egypt.

I am far from wishing to exaggerate the importance of the observations and experience of a single traveller, but I feel confident that some practical acquaintance with foreign lands is a very great advantage in selecting a suitable climate for any given case of disease. At the lowest estimate it clears one's mind of numerous

* January 25, 1884.—The wound has now perfectly healed, and the child is running about without any hernial protrusion, the ring being securely blocked.—J. K. B.

^b Read before the Ulster Medical Society, Tuesday, December 11, 1883.