cure of abdominal aneurism by pressure is one of the greatest and most brilliant achievements of modern surgery, and is the only one of the modern methods treated of in this course which can be said to have been undoubtedly successful. The other methods, such as distal ligation, galvano-puncture, manipulation, etc., applied to thoracic aneurisms, are doubtful remedies for diseases which are in themselves almost incurable; but compression is not a more doubtful remedy than the ligation; and abdominal aneurism is a far more curable disease, and much less frequently associated with extensive degeneration of the circulatory system, than thoracic aneurism.

The lecturer then announced that, if he should deliver the course of Lectures on Surgery another year, he would speak of the surgical treatment of external aneurism.

TWO CASES OF CHRONIC INVERSION OF THE UTERUS, WITH REMARKS.

WITH DESCRIPTION OF NEW APPARATUS FOR REDUCTION.

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WHEN inversion of the uterus has continued after the commencement of the involution process, the difficulties attending its reduction increase rapidly as that process approaches its completion; and when involution has been completed, and the organ has contracted to its normal size, the obstacle to its restitution is very considerable indeed. Besides this, there is the risk that the opposed surfaces of the peritoneum, turned inward, will become adherent, and thus render reduction impossible. Hence it is always extremely desirable to reduce the uterus at the earliest possible period.

The first case narrated below is a painful example of the effects of the neglect of this rule; and in the second, although it was cured, yet a large amount of treatment might have been avoided had the case been attended at an early date after its occurrence.

CASE I.—Mrs. —, primipara, about 25 years old. The labour was natural, excepting that the placenta was adherent, requiring removal, which was done with some trouble. She went on well for ten days, when something came down through the vulva. The nurse called the attention of the medical attendant to the fact; but, without examining, he said it would all come right. It, however, did not cause much distress; but after a few months she began to suffer menorrhagia, which by the time she came under my care had completely blanched her. About the tenth month after delivery, she fell into the hands of another medical man, who examined her and thought it a case of polypus. He asked me to see it, and I found a body hanging from the upper part of the vagina like a polypus; but, upon careful examination all round its attachments by the sound, nothing like the opening into the cervix could be found, nor, indeed, anything of the uterus above the pubis; but the cup-like condition at the position of its attachment could be felt from the exterior, showing clearly that it was the inverted uterus which was felt in the vagina. I made an attempt to reduce it, after placing the patient under chloroform. Compression of the body by the hand in the vagina combined with upward pressure, counteracted by the external support, was, after about half an hour, so far effectual as to restore the cervix, but not the body of the uterus. I then added additional force, but without result, except the production of very severe collapse, upon which the chloroform was withdrawn and the attempt given up. I then, as soon as she was recovered, passed an old-shaped stethoscope into the vagina, and placed the cupped end against the fundus uteri, the ear-end remaining outside the vulva. This end was pressed upward by a T-bandage, and removed twenty-four hours afterwards for a short time and replaced. This pressure was kept up for two days, when she was again placed under chloroform and hand-pressure employed as before. The uterus was partially, but not completely, reduced—that is to say, about half the body still remained unaltered. Again, when the pressure was fairly applied, collapse came on, which gave me great anxiety for a short time, the pulse being for some minutes nearly imperceptible. I then gave up the attempt, for the pulse had risen to 120 before giving chloroform, and the tongue had become dry. There appeared little chance of doing further good, for I employed as much force as was consistent with safety. On both the occasions she was under chloroform. However, she suffered no untoward symptom from the attempts at reduction; indeed, for some time after she had less than ordinary menses, and consequently improved much in general health. I heard about a year and a half afterwards that she was in fair health.

REMARKS.—There can be little doubt that if the medical attendant

had examined this patient when the nurse called his attention to "something being down", the inversion would have been readily reduced. One cannot be too strict in practice in observing the rule in all cases, to fully go into all points; and this holds good particularly after delivery if anything be complained of, because nothing like a swelling can exist about the vulva without its being worthy of attention. If it be an inflamed labium, or an irritated pile, or prolapsus of the uterus, these all require attention, for they may lead to much misery, and, if neglected, will be sure to bring the medical attendant into discredit. But if it be a polypus or inverted uterus—particularly the latter—the importance of our attention is self-evident. I believe that most of our errors arise rather (now-a-days at least) not so much from ignorance as from a want of thoroughness in going into every point in a case. There is, especially after labour, a natural wish that everything should go on rightly, and there is consequently a dislike (which we all feel) to disturb this feeling. Anything being wrong half implies that we have not done our work skilfully, and we hope that all will come right in time. We shirk the inquiry which may rudely disturb our complacent feeling; but, in doing so, we but postpone the evil day. The existence of inversion is one of the last things we should wish to discover. To say that the womb is so disturbed from its natural arrangement that it will be necessary to place the patient under chloroform and perform some kind of operation, is a formidable thing to do, only ten or twelve days after labour; and yet it is better to do this than to allow the patient to go about with an inverted uterus, which is sure to give rise to symptoms requiring medical aid sooner or later.

In this case, the involution of the uterus to its natural size, and very probably the adhesion of the inverted peritoneal surfaces to one another, prevented its complete reduction, which, judging from its near accomplishment, we might fairly argue would have been easy shortly after labour.

The extreme condition of collapse is a point of importance, as it twice occurred at the critical attempt at reduction. In considering this and the next case, I am inclined to think that this mode of reduction is not so suited for chronic inversion as for the acute form. It would be best, at any rate, to try the constant pressure with the elastic bags and the pressure recommended in the next case, first of all; and, if these failed, then to give an anæsthetic and try manual pressure. I would also suggest that sulphuric æther should be employed, either alone or in combination, as having a greater tendency to stimulate the heart's action.

At present, this case has not been followed by the menorrhagia and its consequent anæmia, usually found in chronic inversion of the uterus, although before treatment she was losing greatly. For some time afterwards, the quantity was much less than normal.

CASE II was that of a woman aged about 30, in her third confinement. The child was delivered naturally, but the placenta required the introduction of the hand to remove it. The next day, there was retention of urine, which could only be evacuated, and that in small quantities, with very severe straining, extending over four days. At one time, no urine was passed for thirty hours. She did not, after the subsidence of this trouble, appear to have suffered; but about the tenth day she noticed that something came down to or through the vulva. Not much notice was taken of this, and she gradually got about; but, as she supposed that the womb fell, she merely put on an external support. However, at the end of three months she applied to me, without having consulted any one before about it. I found the uterus completely inverted, rather larger than the natural size, and slightly bleeding when examined.

She was taken into Guy's Hospital under my care, and, after a dose of aperient medicine, was placed under chloroform. I passed my hand into the vagina, and grasped the uterus to compress out the fluid within it. This reduced its size; and, by steady upward pressure, the inverted body passed nearly up to the level of the os. The other hand was placed externally, to give support to the vagina. I was watching her condition at the time when the fullest pressure was being employed, lest any such collapse should occur as did in the last case, when I noticed her aspect staring and livid. It was then ascertained that respiratory movements had ceased. Artificial respiration was used, and galvanism employed down the course of the phrenic nerve and from the spine to the front. After a minute or two (the exact time was not taken) she showed signs of recovery, particularly on the use of the galvanic battery; and gradually her appearance became natural. We continued artificial respiration and galvanism five or six minutes, and then waited. She, however, shortly gave signs of relapse, after which the same measures were continued, till, in about twenty minutes, she began to fairly recover. I did not attempt anything further for some hours, when two India-rubber ball pessaries were introduced into the vagina, and a pad placed externally, supported by a T-bandage. This was removed next

day; and it was found that the cervical portion had become more relaxed. The same treatment was continued another day; and then, after the removal of the bags, an attempt was made, without chloroform, to complete the reduction. But, although the fundus went within the os, yet, in consequence of the pain produced and the recession of the parts, I considered it advisable to wait and to apply continuous pressure to the fundus. I therefore adapted a stethoscope, pressing the cup of the chest-end against it. The ear-end, of course, came outside the vulva; upon this a pad was placed, and a T-bandage firmly applied.

On removing the bandage, twenty-four hours afterwards, I found about two inches of the stethoscope within the uterus, firmly held by it; but by pressure with the finger on one side, and by tilting the instrument, it was removed. I found that the fundus had receded, and that the cup of the stethoscope had made its impression on the posterior wall of the uterus, giving somewhat the feeling, at first examination, that the fundus was not quite perfectly restored. However, further examination showed its true nature; and that the cavity of the uterus was forward and hollow upward, as naturally it should be. At the same time, I felt the want of an instrument which should have a convex end, instead of concave, so as to complete the reduction securely. This I have endeavoured to obtain by an easy adaptation to a stethoscope, which is described below.

A dose of ergot was given to promote the contraction of the organ, and the horizontal posture continued for about ten days. At the end of a week, the os and cervix were still somewhat open. An injection of alum-water was employed, and in a few days it was nearly natural, but with some degree of thickening and irregularity. She went out quite well. The parts contracted to nearly their original size.

The remarks made upon the last case are applicable to this. It is surprising that so little discomfort or shock was felt at the time, when we consider the formidable effects usually seen in inversion occurring suddenly immediately after labour. It is highly probable that the change took place slowly—that is, during three or four days. The treatment, which was unsuccessful in the last, was successful in this case; and there seem to be two points worthy of consideration. The first is, that the effect of the air-bags in the vagina is to dilate it, and along with it the os and cervix. This is produced, probably, in part at least, by the stretching of the upper portion. This dilatation of the cervix enables the inverted body of the organ to pass into it; and then pressure of it in an upward direction stretches open the angle of flexion, and thus the way is paved for its slow restoration. As I have above remarked, attempts at sudden restitution are more likely to be unsuccessful; and I think it will be found best always to employ the air-bags for two days first, and then either to give chloroform and reduce, or to employ pressure directly to the fundus for a day. I am inclined to think, from consideration of the habits of the uterus, that the slower mode is the most certain.

I have had some bags constructed by Mr. Arnold, which I think will be more certain of producing the proper dilatation of the vagina and pressure on the fundus. The first to be introduced is a ring-shaped one, about four inches in external diameter, and its opening about two inches; the fundus uteri passing through the ring. This presses on the upper vagina equally all round, and steadies the uterus under the pressure of the second bag, which is a globular one of not too firm walls, and larger than likely to be wanted, about four inches in diameter, so that it may completely fill the whole vagina below the ring-shaped bag. This of course gives support to the first, and also presses directly on the fundus, thus preparing it for the more complete pressure to follow. A T-bandage, with pad externally, should then be applied. The apparatus for pressing on the fundus is a vulcanite stethoscope, having a pear-shaped elastic bag drawn over the thoracic end and tied round the stem tightly. Into the opening at the aural end a stopcock can be screwed, which is attached to the tube of the India-rubber spraying apparatus, by which means the bag at the other end can be distended.

To apply them to a case: The bowels having been previously opened, the ring-pessary, well greased should be passed over the inverted uterus, and then inflated by its tube, which is then tied. The globular ball should then be introduced and inflated. A T-bandage, with a large perineal pad, must then be applied as tightly as can be borne. Twenty-four hours afterwards, these should be removed, and the vagina washed out with warm permanganate of potash lotion, or, at any rate, warm water. The bags are again introduced, and next day removed, with ablutions afterwards. The state of the uterus should then be examined—whether, indeed, it be not restored to its natural state. If it be not, then the thoracic end of the stethoscope should be pressed against the undus as much as possible in coincidence with the axis of the

organ—that is, with the stem pressed back to the posterior fourchette; a pad being placed on the ear-piece outside it. A T-bandage secures constancy of the pressure. This arrangement is removed next day; and then, if the restoration have been accomplished, the end will have entered the cavity of the uterus. But, to secure the complete restoration of every portion, inflate the ball on the end by the apparatus described. If this be left for two or three hours or more, the air can be let out, and the instrument wholly withdrawn. The distension of the ball is intended to distend the uterus enough to allow the end to be drawn out before it can again close on it. It is well to give a dose of opium every eight or twelve hours, to lessen the irritability of the uterus. A simple stethoscope will do, as this case shows; but it appears to me that a more efficient instrument would be found in the one just described.

Should one day's pressure be not sufficient, it should be continued another day more; but in that case it will be well to allow an interval of half an hour to elapse before reapplying it. If that be unsuccessful, it would be well to give chloroform, and to employ manual pressure.

Excellent hints from various authors, on the restoration of the more obstinate cases of this kind, may be found in the *Obstetrical Transactions*.

SOME REMARKS ON THE "VACCINATION TREATMENT" OF SMALL-POX.

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As I have seen about one thousand cases of small-pox during the present epidemic, six hundred of which have been under my own personal care, perhaps I may be allowed to make a few remarks with regard to the "vaccination treatment" of that disease. I have not employed the vaccination treatment, nor do I intend doing so; as, from what little I have seen, and from all I have heard and read, I have formed the opinion that that treatment is likely to prove more injurious than beneficial. From the various papers that have recently appeared by Drs. Furley, Grieve, and others, I consider the balance of evidence to be against the value of vaccination treatment; and I think the cases which I am about to instance tend to strengthen that conclusion. Although Dr. Furley lays great stress upon the employment of considerable quantities of lymph, yet I think it must be admitted that, where the physiological effects of vaccination were produced, as in three of the following cases, if Dr. Furley's treatment be of value, the operation should have produced some favourable effect on the progress of the disease, which, unfortunately, it did not do. I believe I may say that in the following cases the vaccination treatment had an unusually fair chance, inasmuch as in all the treatment was commenced at an earlier period than we are likely to have an opportunity of when we intentionally employ the method. The cases, which are as follows, all occurred in Cork Street Hospital.

CASE I.—A telegraph clerk, aged 18, vaccinated for the first time at the Cowpock Institution in Sackville Street on a Saturday, got symptoms of small-pox on the same evening (pain in the back, shivering, vomiting, etc.) The rash appeared on the following Tuesday, when he was brought to hospital. This case became thoroughly confluent; the eruption went through its usual stages until the ninth day, when the patient died of laryngitis. The vaccine vesicles followed the usual course, neither modifying nor being modified by the small-pox.

CASE II.—A servant girl, aged 20, vaccinated for the first time ten days before admission, had been suffering from small-pox for eight days before admission to hospital. The eruption was confluent on all parts of the body, and of the appearance usually present at that period of the disease. She died on the fourteenth day of the disease. The vaccine vesicle was beginning to scab when the patient was admitted; and the small-pox eruption was especially thick and full round the vaccine vesicle—owing, I have no doubt, to the increased vascularity of the part.

CASE III.—A child, aged 18 months, was vaccinated four days before admission. There was no sign of the vaccination taking. There was a slight eruption of papules on the face. This proved to be a semi-confluent severe case of small-pox. The child recovered. The vaccination never proceeded further than the stage of slight redness.

CASE IV.—A servant girl, aged 18, was vaccinated for the first time six days before admission. The disease ran exactly the same course as in Case II. The duration of the illness was slightly longer, but it terminated fatally on the sixteenth or seventeenth day.

The above cases, so far from encouraging me to vaccinate patients