

## NEW INSTRUMENT FOR THE RELIEF OF RECENT STRANGULATED INTESTINAL HERNIA.

By GEORGE HUME WETHERHEAD, M.D.,  
*Mem. Roy. Coll. Phy.*

BEFORE entertaining a proposition for relief in such an important disease as incarcerated intestinal hernia, the question presents itself—In what does the impediment consist, that renders the protruded intestine irreducible? Most writers on this subject have directed their attention almost exclusively to the apertures through which such displacements appear. Anatomy in all its minutiae has divided and subdivided every fibre and fibrilla composing the seat of the stricture, and every manipulation and operation, and medicinal means, have been directed to the same part, under the persuasion that the effecting a change of state on this alone, constituted the *ultima thule* of their purpose. Writers on hernia are particular in describing the manner in which the taxis is to be employed, directing us to endeavour to return the part that last descended, first,—thus overlooking, it would seem, the natural consequence of such a course, supposing the operator to succeed in the effort, that of increasing the tension of the part unreduced, by penning up its contents in a diminished space. Now I beg to say, that I do not believe the reduction of the parts of a strangulated rupture ever was accomplished by the taxis in the manner implied by these directions. A circumstance which must strike every one on reflection as paradoxical, while keeping in mind what authors propose to accomplish by the trial, is, that in recommending the taxis, all inculcate the necessity of using it gently. On this point there can be but one opinion, I apprehend; but, since a gentle force can only overcome a still gentler resistance, it follows as a mechanical sequence, that such never can act with effect, so as to overcome the resistance presented to the passage by an unyielding tendinous aperture, and the re-introduction of a mass of inflated intestine, unless the relation the opposed parts have to each other be altered, either by an enlargement of the aperture, or a diminution in size of the parts to be returned.

Now in all cases where reduction ensues from the use of the taxis, this diminution in bulk is precisely what takes place. A gurgling noise is usually described as indicative of reduction, but it must be held in mind that the re-entrance of the gut, and that of the flatus, are not simultaneous; it is the intestinal gas, by the pressure employed in the taxis, opening or forcing a communication between the incarcerated parts, exterior and interior to the seat of stricture, which first enters, and the now collapsed intestine follows by a gentle continuance of

the pressure. Hence, it is the re-entrance of the flatus which I regard as the main and only rational aim of the taxis, and not the forcible reduction of the bowel unemptied of its contents. When this is attained, I consider the principal obstacle to reduction is removed, and therefore that in a recent strangulated enterocele, it is the evacuation of the flatus to which the surgeon's endeavours ought primarily to be directed.

It would be uncandid on my part, not to avow that this view of the subject has been already entertained by a writer on hernia, although his work is now nearly forgotten as a general reference; I allude to a Mr. Geoghegan, who wrote a commentary on this disease some thirty or forty years ago, and I am indebted to the kindness of Mr. Copland Hutchison for pointing it out to me. This author's practice in hernial cases, where strangulation existed, was directed principally to the contraction in size of the protruded parts by the external application of cold, and by the gentle pressure of the taxis, to endeavour to evacuate the flatus they contained; when these, and other means not immediately connected with our subject, failed, he then had recourse to the usual operation.

Not aware of Mr. Geoghegan's work, or of his ideas on the above subject, a similar train of thought as to the chief cause of the impediment to reduction in recent ruptures, occurred to myself, with this addition, that if the confined flatus could not be made to re-enter the abdomen by skilful manipulation, the next feasible mode of relief was to evacuate it externally, and this I propose to effect by a very minute trochar, in which the stilette is not larger than a full-sized acupuncture needle. The trochar I forward herewith for your inspection; it has already been seen by some of the first operating surgeons in London.

With respect to the advantages of this instrument, I may be permitted to point out the following:—

First, The simplicity of the mode of relief proposed, and of the construction of the instrument itself; for it is merely a trochar in miniature, which Mr. Weiss made for me according to my instruction.

Secondly, The absence of all danger in using it; for even if it do not effect the reduction of the hernia, no bad consequences are likely to accrue, even though a main artery, by some awkward management, were pierced in its employment. We know that an acupuncture needle may transfix a large artery, and even puncture the heart itself, and yet neither inflammation nor hæmorrhage ensue; and, as I have before observed, the stilette of this trochar is not larger than some acupuncture needles are.

And, lastly, I may point out, as not its least recommendation to unprejudiced consideration, the readiness with which it may be employed by those whose recollection of the delicate anatomical relation of the parts concerned in hernia, may cause them to hesitate too long ere they undertake the usual operation, or to defer it altogether, relying for a safe issue on other means, which may eventually prove insufficient; and all these are apart from the grand public consideration, that if it proves on trial as effectual as I sincerely hope it may, and in which expectation some of my surgical acquaintances concur, the necessity of recurring to one of the greatest and most dangerous operations in surgery will be in many cases entirely superseded.

I take leave to advert to the objection that might be urged by some, that air confined in the protrusion is not the only cause of the obstacle to its reduction, and therefore the means proposed above may fail on this account. I am aware that feculent matter may form part of the bulk hindering replacement, as well as tumefaction arising from effusion of serous matter into the cellular tissue about the neck of the sac, caused by the stricture of the tense edge of the rings, as they are called, and the enlargement of other parts produced by inflammation. All I have to reply to such observations, if made, is, that should these obstacles of themselves be sufficient to impede the re-introduction of the prolapsed parts, though the fact is questionable, yet they will much more readily yield to bleeding and other means, after the evacuation of the flatus than before it; for it cannot be denied, that one great source of irritation will be removed by the release of the parts from a perilous degree of distention. I leave it for an after consideration to determine, whether fluid feculent matter could be extracted through the canula, if assisted by an elastic gum bottle, although my present impression is, that this would never be found necessary after the evacuation of the gaseous contents of the gut, for I think it would then readily re-enter with its natural envelope, the intestine.

I may mention that Mr. Geoghegan, towards the end of his little work before referred to, submits to the profession, to open the hernia at its inferior part, in order to empty it of its contents, where, from timidity, the patient will not submit to the regular operation, and he quotes Gooch as recommending this practice, when it appears that mortification has taken place. With what instrument, or in what manner he proposed this to be effected, he does not say.

I have only to add, before concluding, that it might be advisable in all cases where this instrument is employed, first to scratch

the skin with a lancet before introducing it into the tumour, although some of my medical acquaintances think that even this is not necessary.

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#### ON CONTUSIONS OF THE ABDOMEN.

*From the Clinique Chirurgicale of*  
*M. LARREY.*

THE treatment of this accident, particularly consists in copious venesection, and cupping over the abdomen; besides these remedies, however, there is another method, which I originally learned from the Esquimaux, in the year 1788; and the extraordinary effects of which I have, since that time, had frequent opportunities of witnessing. It happened that during a tremendous storm, the long-boat, with 16 men, was dispatched from the frigate *La Vigilante* (of which I at that time was first surgeon) to the Island of St. Pierre Miguelon, and that it was there wrecked, all the crew being thrown with great violence on the shore. Some Esquimaux, who were in the neighbourhood, very humanely gave them all possible assistance, and endeavoured to cure the wounds and violent contusions which they had received. They first made frictions, with an aromatic oil all over the abdomen, and then enveloped the wounded in the skins of recently killed animals. The extraordinary effect of this latter method led me to try it afterwards, especially in cases of violent contusions of the abdomen, by spent cannon-balls, &c. In order to have the full effect of this method, it is necessary that the skin should still possess, in some degree, its animal heat, and the animal must accordingly be skinned immediately after death; it must be kept on for two or three hours, or until it gets cold, after which time it may be removed, and frictions of hot camphorated camomile oil are made over the injured parts. As to the manner in which this method operates, it is difficult to give any satisfactory explanation; it seems, however, that the vital emanations from the internal surface of the animal skin are absorbed, and they may thus, perhaps, contribute to quicken the absorption of the extravasated blood and restore the action of the capillary system.

During the campaign in Spain, in 1808, the Duke of Montebello was thrown from his horse; he received a violent contusion of the chest and abdomen, from the horse's falling on him. He was immediately brought to Vittoria, where I found him covered with ecchymoses, and perfectly motionless; the abdomen was much swelled, and extremely tender; respiration laborious, the urine sup-