as, by the neglect of it, a repetition oſ the first operation would ſoon be neceſſary.

Chap. XXII. *Of Paracentesιs of the Abdomen, or Tap­ping.*

This operation is an opening made into the abdomen, in order to empty any quantity of extravaſated water col­lected in that ſpecies of dropſy called the *aſcites.*

A fluid in the cavity of the abdomen is diſcovered by the swelling which it produces ; by a ſense of tightness in the part affected ; by laborious and difficult breathing, eſpecially when in the horizontal poſture ; but particularly by a ſenſe of fluctuation being communicated to the fingers placed on one ſide of the abdomen, while the ſwelling is forcibly ſtruck on the opposite ſide. There is beſides much thirſt, a dry ſkin, ſcantineſs of urine, &c. Whatever may be the in­fluence of diuretics and other evacuations in the cure of general dropſical affections, they are rarely ſerviceable in local diſeaſes of this kind, and even the operation of tap­ping ſeldom cures the diſtemper ; but it commonly gives the patient eaſe for the preſent time, and is attended with very little pain.

Upon the ſuppoſition that nothing forbids the extraction of the water, the manner of operating is this : Having pla­ced the patient in an horizontal ſituation, as beſt suited to prevent fainting, and to allow the water to run freely off, the part to be perforated ought to be marked with ink ; and the moſt approved part for the operation ſeems to be at a point lying at nearly an equal diſtance between the um­bilicus and the centre of the ſpine of the os ilium, this be­ing moſt out of the way of any of the viſcera, and ſufficiently depending to allow the water to eſcape ; and as the ſpleen is leſs frequently enlarged than the liver, the left ſide is generally preferred. Various means have been uſed for applying an equal preſſure in this operation. Some apply preſſure by the hands of aſſiſtants ; others uſe a broad piece of flannel, or other kinds of cloth, ſlit a certain way from each end ; then the ends are drawn by aſſiſtants till ſuffici­ent preſſure is made. Broad belts are uſed by ſome prac­titioners ; but one of the beſt contrivances for this purpoſe is the bandage invented by the late Dr Monro, (fig. 70.) Till very lately, a puncture was firſt made with a lancet, then a trocar of a round form (fig. 71.), and with a trian­gular point, was conſtantly uſed : but the entrance of this inſtrument being always attended with difficulty and pain, a flat trocar is now very frequently employed ; and that in­vented by Mr Andree (fig. 72.) ſeems the beſt which has yet appeared. The bandage being now applied and drawn a little tight, the part to be punctured is to project a little over the edge of the bed. The operator fixes the head of the trocar in the palm, while the ſore finger directs the point of the inſtrument. He is then to push it forwards till he is ſatisfied, by the want of reſiſtance, that the end of the canula has reached the cavity of the abdomen. The perforator is now to be withdrawn, and the water allowed to flow as long as any of it can be taken off, the bandage being ſrom time to time pulled to favour the diſcharge: But if the patient become faint, a ſtop for a few minutes ſhould be put to the diſcharge every now and then, by placing the point of the finger upon the mouth of the canula. If any of the viſcera happen to ſtop the flow of the water before the ſwelling is much diminiſhed, a blunt probe is to be introduced, but bent at the end, lest it slip into the cavity of the abdomen. When the ſerum is thick and gelatinous, it may ſometimes be neceſſary to introduce a larger trocar than the one firſt employed. When the water does not flow, becauſe it is collected into ciſts, the canula is to be withdrawn, and the wound covered with a pledget of ſimple ointment. The operation may then be renewed im­mediately, or on the following day, upon the oppoſite ſide of the abdomen, or in the moſt depending part of the tu­mor, in whatever part of the abdomen it may be placed.

During the operation it is neceſſary to keep up a preſ­ſure on the abdomen, otherwiſe the patient will be apt to fall into faintings from the weight on the great veſſels of the abdomen being taken off, and the sinking of the dia­phragm ſucceeding, in conſequence of which more blood flows into the inferior veſſels than uſual, the ſuperior ones are left too empty, and thus the regular progreſs of the circulation is interrupted. To obviate this, the preſſure muſt not only be made during the operation, but be after­wards continued. As to the dreſſing, it has been already mentioned, that the wound may be covered with a pledget of ſimple ointment ; but between the skin and the roller ſome recommend a piece of flannel dipped in brandy or ſpirit of wine to be applied. The bandaging in this manner may even have ſome effect in preventing a return of the diſ­order. When the water again collects, the operation ſhould be repeated whenever the swelling has acquired a conſider­able ſize : and though this operation does not always effect an abſolute cure, yet it ſometimes preſerves life a great many years, and even a comfortable one, eſpecially if the wa­ters have been long collected.

After the operation, practitioners adviſe the abdomen to be frequently rubbed with aſtringent ſpirituous applica­tions. This cannot be done for the first two days after the operation, as it would then be improper to remove the bandages ; but after that time, they may be removed daily, for about a quarter of an hour ; and camphorated ſpirit of wine, or other applications which may have a ſimilar effect, may be applied with ſtrong friction over the abdomen, the body being kept, during this period, in the horizontal ſitu­ation, and the bandage applied immediately after the fric­tion is finiſhed.

Sometimes, inſtead of water, we find air contained in the abdomen ; and the inflation is of two kinds : Firſt, that in which the air is contained in the inteſtines ; in which caſe the patient has frequent exploſions of wind, with a ſwelling of the belly frequently unequal. Secondly, where the air is collected in the cavity of the abdomen ; and here the ſwelling is more equal, without any conſiderable emiſſion. of air. In both varieties of the diſeaſe the ſwelling is more tenſe than where water is contained, and the belly sounds when ſtruck, and affords to the touch and preſſure near­ly the ſame ſenſation as is received from a bladder filled with air. Of theſe two diſorders the former is by much the moſt common. Many extenſive practitioners, have never met with an inſtance of true abdominal tympanites. A few well authenticated caſes, however, have occurred, where the air was collected between the containing and contained parts of the abdomen. In ſome of them the air was found to have eſcaped by a ſmall hole in the inteſtines, from which it has been ſuppoſed that the other caſes were of the ſame nature. When the ſymptoms become urgent, there is as much neceſſity for diſcharging the air as for drawing off the water in caſes of dropſy. The preſſure and perforation are to be made in the ſame manner as directed for aſcites, with this difference only, that a trocar of the very ſmalleſt ſize ought to be uſed ; for by it the air can be as eaſily discharged, and the wound will heal more readily than where a large opening is made. After the air has been extracted, the treatment ought to be nearly the ſame as that recommended in caſes of aſcites.