XI. *Account of two Inſtances of uncommon Formation in the Viſcera of the Human Body. By Mr.* John Abernethy, *Aſſiſtant Surgeon to St. Bartholomew's Hoſpital.* Vide *Philoſophical Tranſactions of the Royal Society of London, for the Year* 1793. Part I. 4to. London, 1793.

THE peculiarities of the firſt of the two caſes deſcribed in this paper, conſiſt in an uncommon tranſpoſition of the heart, and diſtribution of the blood veſſels; together with a very remarkable, and, perhaps, ſingular formation of the liver. The body, which contained theſe deviations from the uſual ſtructure, was brought to Mr. Abernethy for diſſection; with its hiſtory whilſt alive he is, he obſerves, unacquainted. The ſubject, we are told, was a female infant, which meaſured two feet in length; the umbilicus was firmly cicatrized, and the umbilical vein cloſed: from theſe circumſtances our author concludes that it was about ten months old. The muſcles of the child, which were large and firm, and covered

vered by a conſiderable quantity of healthy fat, together with the general appearance of the body, ſtrongly implied, it ſeems, that the child had, when living, poſſeſſed much vigour of conſtitution.

Mr. Abernethy firſt relates thoſe varieties of the ſanguiferous ſyſtem which were found on the thoracic ſide of the diaphragm; and afterwards deſcribes thoſe which were diſcovered in the abdomen: this naturally leads him to the account of the uncommon ſtate of the liver.

The ſituation of the heart, he obſerves, was reverſed; the baſis of that organ being placed a little to the left of the ſternum, whilſt its apex extended conſiderably to the right, and pointed againſt the ſpace between the ſixth and ſeventh ribs. The cavities uſually called the right auricle and ventricle were conſequently inclined to the left ſide of the body; therefore, to avoid confuſion in the deſcription, our author follows Winſlow, in terming them anterior; whilſt thoſe cavities uſually called left, he terms poſterior. The inferior vena cava, we are told, paſt, as uſual, through a tendinous ring in the right ſide of the centre of the diaphragm; it afterwards purſued the courſe of the vena azygos, the place of which it ſupplied: after

having united with the ſuperior cava, the conjoined veins paſſed beneath the baſis of the heart, to expand into the anterior auricle. The veins returning the blood from the liver united into one trunk, which paſſed through a tendinous aperture in the left of the centre of the diaphragm, and terminated immediately alſo in the anterior auricle.

The diſtribution of blood to the lungs, and the return of it from thoſe bodies, were accompliſhed after the uſual manner.

The aorta, after it had emerged from the poſterior ventricle of the heart, extended its arch from the left to the right ſide, but afterwards purſued its ordinary courſe along the bodies of the dorſal vertebræ.

From the curvature of the aorta there firſt aroſe the common arterial trunk, which, in this ſubject, divided into the left carotid and ſubclavian arteries; whilſt the right carotid, and ſubclavian, proceeded from the aorta by diſtinct trunks.

The inferior aorta gave off the cæliac, which, as uſual, divided into three branches; but that artery which was diſtributed to the liver appeared, it ſeems, larger than common; and exceeded, by more than one-third, the ſize of the

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ſplenic artery of this ſubject. This was the only veſſel, our author obſerves, which ſupplied the liver with blood, for the purpoſe either of nutrition or ſecretion.

The vena portarum was formed in the uſual manner, but terminated in the inferior cava, nearly on a line with the renal veins. The umbilical vein ended in the hepatic vein.

The liver was of the ordinary ſize, but had not the uſual inclination to the right ſide of the body; it was ſituated in the middle of the upper part of the abdomen, and nearly an equal portion of the gland extended into either hypochondrium.

The gall bladder lay collapſed in its uſual ſituation; it was of a natural ſtructure, but rather ſmaller than common; and was found to contain a tea ſpoonful of a fluid which, in its colour and other properties, reſembled the bile of children.

The inteſtines did not contain much alimentary or fœcal matter; this was, however, we are told, as uſual, deeply tinged with bile.

The ſpleen conſiſted of ſeven ſeparate portions, to each of which a branch of the ſplenic artery was diſtributed. The other viſcera were

found, and of their uſual ſtructure and appearance.

Mr. Abernethy could diſcover no cauſe to which the child's death could be aſſigned. He obſerved that the tongue was incruſted with a dark coloured mucus, which indicated the exiſtence of fever previouſly to the infant's death.

When an anatomiſt, he obſerves, contemplates the performance of biliary ſecretion by a vein, a circumſtance ſo contrary to the general economy of the body, he naturally concludes, that bile cannot be prepared unleſs from venal blood; and he alſo infers, that the equal and undiſturbed current of blood in the veins is favourable to the ſecretion; but the circumſtances of the preſent caſe, in which bile was ſecreted by an artery, prove, he thinks, the fallacy of this reaſoning. He regrets that only ſo ſmall a quantity of this bile could be collected from the gall bladder; as, ſurely, it was, he obſerves, very deſirable to aſcertain more accurately how far the qualities of this curiouſly-prepared fluid reſembled common bile.

That the fluid ſecreted by the liver was not, in this caſe, deficient in quantity, appears to him ſufficiently evident. If the gall bladder had not ſuffered occaſional repletion, he thinks

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it would have been found in a ſtate of greater contraction. Some bile, he obſerves, had eſcaped from the divided gall-ducts, in removing the ſtomach and duodenum, before the uncommon termination of the vena portarum was diſcovered; and a conſiderable quantity of this fluid, he adds, would be required to give ſo deep a tint, as in this caſe was viſible, to the alimentary matter.

He ſuppoſes, therefore, that the empty ſtate of the gall bladder was the effect of accident, and not of deficient ſecretion by the liver. The bulk and well-nouriſhed ſtate of the body do, he thinks, demonſtrate that there was no defect in the functions of the chylopoetic organs.

But it will probably be inquired, from what cauſe the death of the child originated. It may, our author obſerves, be ſuſpected that the mal-formation of the liver contributed to its deceaſe; and particularly as no derangement of any vital organ could be diſcovered. Yet if it be conſidered how frequently children die from nervous irritation, or fever, the probability of this ſuſpicion is, he thinks, diminiſhed. The circumſtances of the caſe, he obſerves, may impreſs others with contrary ſentiments; but he himſelf will remain ſatisfied with

with having faithfully deſcribed the appearances of the body, and having offered thoſe remarks which he thinks deducible from them.

The appearances deſcribed in this caſe are repreſented in two plates, for which we muſt refer our readers to the work itſelf.

The peculiarity of the next caſe, related by our author, conſiſts in an uncommon formation of the alimentary canal. The ſubject of it was a boy, whoſe body was brought to him for diſſection; it meaſured four feet three inches in length; but was well formed, and had moderately large limbs, but flabby, as if waſted by recent diſeaſe.

Upon opening the abdomen, which was enormouſly ſwoln, there appeared a more than ordinary extent of large inteſtines, in a ſtate of great diſtention.

The diameter of the canal meaſured about three inches, and its dimenſions were nearly equal in every part.

The matter, we are told, with which it was turgid was of a greyiſh colour, of a pulpy conſiſtence, having little fœtor, and quite unlike the uſual fœcal contents of the large inteſtines.

The length of the colon, Mr. Abernethy obſerves,

obſerves, was uncommon; for after having, as uſual, aſcended to the right hypochondrium, it was reflected downwards, even into the pelvis; it then, it ſeems, reaſcended to the left hypochondrium, and afterwards purſued its uſual courſe.

After turning aſide this large volume of inteſtine, to examine the other parts of the alimentary tube, our author was ſurpriſed to diſcover that the ſubject contained ſcarcely any ſmall inteſtines. Theſe viſcera, with the ſtomach, lay, he obſerves, in a perfectly collapſed ſtate; and their texture was ſo extremely tender, that they were torn even by a gentle examination. The duodenum, jejunum, and ileum, when detached from the body, and extended, meaſured, it ſeems, only two feet in length, whilſt the extent of the large inteſtines exceeded four feet.

The utmoſt length of the inteſtinal tube, in this ſubject, was little more than ſix feet, whereas it ſhould, it is obſerved, have been about twenty-ſeven feet, had it borne the ordinary proportion to the length of the body.

Mr. Abernethy diſtended and dried this curious alimentary canal, and ſtill has it in preſervation.

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As the ſmall inteſtines meaſured only two feet in length, this extent, he obſerves, was doubtleſs inſufficient for the preparation and abſorption of chyle; theſe proceſſes muſt therefore, he thinks, have been, in a great degree, performed by the large inteſtines.

The form and ſtature of the boy, our author remarks, ſhow that nutrition was not ſcantily ſupplied; he died, he thinks, evidently from a want of inteſtinal evacuation. Whether the unuſual ſtructure of the canal contributed to the production of diſeaſe, cannot, he obſerves, be readily determined; it appears, however, he adds, very probable that uncommonly formed parts, although capable of ſupporting life, may be leſs adapted to ſuſtain the derangement of functions conſequent to diſeaſe.

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