

that it has often been diagnosed where subsequent investigation did not corroborate the opinion. I recollect a case of this kind which occurred in the practice of the late Dr. Crampton, when I was clinical clerk at the Whitworth Hospital, where the supposed abscess was discovered after death to be nothing but the distended gall bladder which had projected beyond the inferior margin of the liver, and was rendered more prominent by the thinness of the abdominal parietes; and another case is recorded in the Dublin Hospital Reports, where this viscus, under similar circumstances, was actually opened in mistake for an abscess.

The absence of fluctuation in Davis' case, did not seem sufficient to prove that our conjecture was incorrect, because it was supposed to deep-seated, if it existed at all, and so to be unfavourably circumstanced for yielding satisfactory evidence to the sense of touch.

ART. XVII.—*Researches on the Diagnosis of Hernia*. By
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THE diagnosis of strangulated hernia is sometimes very obscure. In many persons, especially females, the hernia has escaped detection, and either death or artificial anus has been the result, while, occasionally, its phenomena have been so accurately imitated by other disease, that unnecessary operations have been performed by surgeons of acknowledged merit.

RUPTURED INTESTINE AND EFFUSION INTO THE HERNIAL SAC.

1837. Isaac Benson, æt. 35 years. Abdomen exceedingly distended and painful in every part to the most trifling pressure; incessant vomiting of yellow inodorous matter; bowels constipated for the last three days. Hiccough; an irreducible painless tumour occupies the left inguinal region in the usual

site of hernia. On pressure, its volume is slightly diminished, the diminution being attended with a gurgling noise, on assuming the erect position, the tumour fills apparently with a fluid, which, on being returned, cannot again distend the tumour, provided strong pressure be made. It covers the spermatic chord. Countenance expressive of great anxiety; thirst; skin cool and clammy; pulse 130, thready; respiration 48; feet cold.

Three days since fell on his abdomen, from a height of a few feet, and, in about four hours afterwards, the symptoms commenced which have been gradually increasing. Denies that he has ever been subject to hernia.

Vs. ad ʒ xii. Pulv. Opii gr. iii. c. Calomel. gr. vi. Foment.

Three hours afterwards I again visited him, accompanied by two medical gentlemen.

The blood was much buffed and cupped; pulse 140, and scarcely to be felt; face pale; tongue white, moist, and cold; intellect at present clear, but it has been confused during my absence. Abdomen less painful; has passed urine; syncope in the erect position. His friends, who are very anxious for his safety, begged that no possible mode of relief should be withheld. The operation for hernia was decided upon, we having first intimated to his family, that it alone presented any chance of recovery, that the danger would not be increased by it, but that he might sink before its completion. We were repeatedly assured both by himself and his wife that he had never laboured under rupture, and that the tumour was not in existence previously to the fall, and that it had appeared since.

An incision having been made through the integuments, fasciæ, and cremaster muscle, there were presented to our view all the appearances of an old and empty hernial sac. On pressing the abdomen with the hand, and slightly elevating the body, it became distended apparently with air and fluid, and was again emptied by a very slight pressure on the tumour. The walls

of the tumour were nearly half an inch thick, and the inner surface glided as is usual in a hernial sac. His friends and himself were again questioned as to the existence of a tumour previously to the accident, but their answers were positive as to its recent appearance. The case was now more obscure, but we were satisfied that no strangulation existed. The tumour was now separated from its attachments, which were cellular, dissected off the spermatic chord, and its neck traced to the external or superficial inguinal ring. The inguinal canal was opened for a few lines with a bistoury, and the parts being brought together by adhesive plaster and bandages, no other remedy was proposed. He died in four hours afterwards, and his body was examined on the following morning by order of the coroner.

The peritoneum of the intestines and abdominal walls displayed the usual signs of inflammation.

When opened a large quantity of fetid gas escaped, and the cavity contained, besides sero-purulent fluid, a large quantity of faecal matter. A perforation was sought for and found in the hypogastric region. The lower portion of the ileum was the intestine injured. It was evidently a laceration about one inch in length, and one-fourth in breadth, situated on its anterior portion, and in its transverse diameter. The edges were jagged; the openings of the serous and mucous coats corresponded in size, and the neighbouring portion of mucous membrane was perfectly healthy. The tumour was an old hernial sac; no marks of external injury either opposite the laceration, or over the sac could be detected.

This man met with his death unfairly, and our difficulty in not arriving at a correct diagnosis, arose from our giving credence to his statement in direct opposition to our medical and pathological knowledge. I mistook the disease for direct inguinal hernia, and even when operating, thought the tumour might be a portion of large intestine, thickened by inflammation. The true nature of the disease was laceration of the ileum from in-

jury, but whether the injury was received while the intestine was in the sac, or general cavity of the abdomen, could not be determined.

CONGENITAL HERNIA AND ULCERATION OF THE APPENDIX
VERMIFORMIS.

February 10th, 1835. John Hignett, æt. 2 years. Four hours since commenced screaming, and complaining of pain in the abdomen. The whole of the abdomen is swollen, tympanitic, and exquisitely tender. Congenital hernia of right side; but at present there is no intestine in the scrotum. A small, firm, and round tumour occupies the external ring, it is anterior to the chord, and at first it was supposed to be a blighted testicle; on examination, however, both testicles are in situ, and there is hydrocele of the right tunica vaginalis. The fluid of the hydrocele, when compressed, ascends as high as the tumour, but cannot be made to return into the abdominal cavity. The medical attendant is positive as to the previous existence of hernia. An attempt was made by the taxis, and next by compressing the fluid, to return the supposed intestine, but failed. The warm bath was next tried, during which time the taxis was repeated. Ice in a bladder was then applied to the tumour for the space of an hour. Not succeeding, the operation was proposed, acceded to, and another opinion sought for. On removing the taxis, the tumour receded, but without any apparent relief, and the fluid of the tunica vaginalis passed into the cavity of the abdomen. Enemata, hot fomentations, laudanum, and one drop of prussic acid were prescribed. When visited two hours afterwards, the symptoms were increased. The pulse was detected with difficulty; extremities, tongue, and breath cold; tossing of the arms; film on the cornea; refuses drink. He died sixteen hours after the symptoms were first noticed.

Examination.—The tunica vaginalis was distended, and, on being opened, a fluid of a muddy appearance, mixed with shreds

of coagulable lymph, escaped. Fetid gas was also noticed. The serous membrane showed no mark of vascularity, and communicated with the peritonæum. The upper portion of the canal was slightly adherent, but a gum elastic catheter passed readily into the abdomen, and a large quantity of gas was thus removed; the abdomen immediately diminished in volume. These symptoms pointed out a perforation of the intestine. The peritonæal coat of the large and small intestines, bladder and stomach, was very much inflamed, yet the adhesions were few and slight. Feculent matter was found in the hypogastric region, in the right iliac fossa, and in the pelvis. After a long search, the perforation was found by pouring water into the stomach with the catheter, in the free extremity of the appendix vermiformis. The tumour was supposed to be a portion of feculent matter until one of the spectators pointed out a substance which proved to be a small cherry stone. The orifice of the ulcer was very small. The explanation of this very obscure case was now satisfactory, and it requires no comments. It may be worth remarking, that I have never known a child under four years of age, recover of any complaint attended with cold breath, and a failure of the pulse.

TESTICLE RETRACTED TO THE ABDOMINAL RING.

August 20, 1838. A foreign gentleman, æt. 30, was suddenly seized with the following symptoms: an excruciating pain in the right groin, increased on the slightest motion of the corresponding lower extremity; a tumour larger than a marble, and sensible to the slightest pressure, is found at the external ring; no impulse is communicated to it by coughing; the testis is absent from the scrotum, a circumstance before noticed.

He is subject to this attack five or six times in the year; the pain continues from ten minutes to an hour, and then suddenly subsides, leaving him perfectly well. When the pain is more severe than usual there is vomiting.

A large dose of laudanum was prescribed, and an exhausted

cupping-glass applied over the tumour. The pain ceased in a few minutes, after having continued more than twenty. When the cupping-glass was removed he walked about; the testicle had descended, and the chord, which was larger and softer than usual, felt as if it was varicose, but could not be lessened by pressure either upwards or downwards. A very eminent surgeon considered it hernia; but he had never seen him during the attack. My impression of the disease was, that the testicle was attached to the omentum, by which it was occasionally retracted to the orifice of the ring. A nicely fitted truss was applied over the external ring. Fifteen months have now elapsed without a return of pain. I have a distinct recollection of having read of a similar case, and the sufferer, I think, was the celebrated Zimmerman. If the truss failed in warding off these attacks, he gave his consent to permit me to cut down on the chord and divide the omentum, or even the chord, should I deem it necessary.

STRANGULATED HERNIA.

Sept. 22, 1837. A married female, æt. 45, the mother of several children, had femoral hernia of the left side for three days. The *taxis* was persevered in so long and so rudely, that the most trifling handling of the part could not be borne. When operating, there was so much confusion about the anatomy of the parts, owing to their being agglutinated by lymph, that a layer was raised with the supposition of its being the hernial sac, as fluid was detected beneath, and the internal surface glided on itself, when the membrane was pinched between the finger and thumb; on dividing it, a thin, brown fluid, similar in colour to the contents of the intestinal canal, appeared. We supposed that the intestine had been ruptured by the *taxis*, and it was proposed to enlarge the incision, and leave the case to nature. However, I continued my dissection very cautiously, and on cutting the part freely, it was evident that even the sac was as yet unopened, and that the fluid was the product of inflammation, tinged with the colouring matter of bile, as she was

suffering from jaundice, which, until that moment, was not observed. The sac contained a deeply-coloured yellow serum, with a knuckle of small intestine. It required the greatest care to divide the stricture safely, so closely was the intestine girded; and when drawn out, it was so deeply indented in two places, that it was dreaded that the structure was injured. It was drawn through the fingers several times before it was returned into the abdomen. Recovery took place without any troublesome symptom, excepting the suppuration of the disturbed parts. The hernia has not since descended; and she follows an active occupation without the use of a truss.

May 1, 1840. Mrs. M——, æt. 62. Obstinate constipation for eight days; constant vomiting. The matter vomited is similar to fæces both in colour and smell. Abdomen free from the slightest swelling or pain; slight hiccup; pulse 80; countenance natural; thirst; skin cool; no appetite; intellect clear; cramp of anterior part of right thigh; a small, hard, moveable tumour in the femoral ring. I was asked to operate, but refused, as the tumour did not give me the idea of hernia.

Has had usually a relaxed state of bowels; but two years since had constipation for four days, attended with abdominal pain, which yielded to bleeding.

Olei Crotoni gutta cum Ext. Col. Co. gr. v. tertiis horis. Inject cold water until the bowels are distended.

10 o'clock, P. M. Three pills have been taken, and two quarts of water injected.

May 2nd. No relief; passes water. She was placed on the floor, and cold water poured on the abdomen from a height for one hour.

Hydr. Submur. g. ii. omni hora.

3rd. Pulse 96, weak: she is desponding.

Hydrargyri Vivi. ʒ iv. Pulv. Opii. gr. ii.

4th. No change.

Cont. Medicamenta.

5th. *Mane.*

Hydr. Vivi. ζ ii.

Vespere. Eight natural stools ; pulse 100 ; vomiting ceased ; abdomen quite flat. She gradually recovered without any other symptom worth recording. I know not the cause of the constipation here, unless it was intussusceptio. There was no hernia, no inflammation, no fæces in the colon. The enemata of cold water were prescribed, lest there should have been a lodgment in the caput coli, and in order that a powerful and safe remedy should not be omitted in so desperate a case ; but my opinion was, that the obstruction was in the small intestines beyond the reach of the fluid. Independently of the abdomen being free from pain and swelling, I think we may safely conclude, that where we have fæcal vomiting, we have very trifling peritonitis, for as the effect of peritonitis is to check the action of the intestines, as long as this action continues we may conclude there is no peritonitis. Fæcal vomiting has been absent in one case of omental hernia which became strangulated, and terminated fatally ; also in two cases of stricture of the rectum. These cases I have just witnessed. I am inclined, therefore, to look upon fæcal vomiting as a symptom solely depending on mechanical obstruction of the small intestines. A few days since I saw a person suffering from peritonitis, which was supposed to be the effect of hernia ; but before I saw him, I ventured to assure his surgeon that it could not be hernia, as there was no fæcal vomiting. There might be an omental hernia without fæcal vomiting, but its symptoms are seldom so severe as to produce peritonitis in a few days.