

CASE
OF
EXTENSIVE LACERATION OF THE LIVER,
WITH
RUPTURE OF THE GALL BLADDER, AND
OTHER LESIONS,
CAUSED BY EXTERNAL VIOLENCE; TERMINATING FATALLY
ON THE NINTH DAY;
WITH REMARKS.

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Received Nov. 15th—Read Nov. 23rd, 1847.

WILLIAM FISHER, æt. 17, a labouring boy, was brought to the Staffordshire General Infirmary, about eight o'clock on the evening of the 28th of March 1846. It was stated that he had been standing on the shaft of a water-cart, assisting in filling it, when the horse moving slowly forward caused him to fall, and one of the wheels of the cart passed over his abdomen, just below the false ribs. He was seen by a surgeon an hour and a half after the occurrence of the accident, who found him complaining of pain in the abdomen, but not of a severe character. His pulse was slightly accelerated, and the amount of shock trifling. He was received into the infirmary four hours after the accident, and he then seemed to suffer very little; no marks of violence could be detected, and pressure on the abdomen did not materially aggravate the pain, which was by no means acute. His bowels had not acted

since the preceding day : half an ounce of castor oil was administered, and warm fomentations were applied to the abdomen.

On being left for the night he was quiet and inclined to sleep, his pulse being 80, and natural in other respects. At three o'clock in the morning he was again seen, and then complained of great pain in his abdomen, increased by pressure. The pulse was small and rapid, and his countenance anxious : he was bled to fourteen ounces, and two grains of calomel with one-third of a grain of opium were ordered to be taken every two hours : he nearly fainted before the vein was closed, and vomited on taking the first pill ; the ejected matter consisted of green bilious matter, mingled with mucus. He expressed himself as greatly relieved after vomiting. On Sunday, the 29th, the bowels not having been moved, a turpentine enema was administered, which produced one not very copious evacuation of a perfectly natural colour : his tongue was coated with a white fur, and moist : pain was not complained of excepting when he lay on his back, and pressure made in the epigastric region ; this pain was quite relieved on his assuming a sitting or an upright posture.

On Monday, the pain still continuing to a slight extent, twelve leeches were applied, after which the pain entirely ceased. His bowels acted freely, and his tongue began to be cleaner. He appeared quite convalescent, and on Wednesday expressed a desire for something more to eat than the fever diet of the infirmary. On this day he left his bed, and continued in so satisfactory a state of progress towards perfect health, that on Friday mention was made of his returning home ; this proposition was not agreed to, on account of a degree of sharpness which remained in the pulse, and an unnatural degree of heat of the surface.

On Friday, soon after noon, he was suddenly seized with extreme pain, and a sense of tightness in the abdomen ; in an hour after his seizure the pain extended all over the abdomen, and was increased by pressure ; the countenance was full of anxiety ; and his pulse was small and extremely rapid :

the symptoms present were those of acute peritonitis, from effusion of foreign matter into the cavity of the abdomen. A number of leeches were at once applied, and calomel and opium were given as at first.

In the evening effusion had evidently commenced, though he said he had felt relief from the application of the leeches; during the night mercurial frictions were used.

On Saturday morning he had become very restless, and found relief in changing his posture every minute; he wished to walk about continually, saying he was easiest when moving. The swelling of the abdomen had increased, and was evidently owing to the presence of fluid in the cavity of the peritoneum.

These symptoms continued, without remission, till Sunday afternoon, about fifty hours after the supervention of the acute attack, and the ninth day after the occurrence of the accident, when he died, retaining his consciousness to the last.

A post-mortem examination was ordered by the coroner: it was performed forty-three hours after death. On cutting through the abdominal parietes there was an immense gush of a dark liquor, having precisely the colour and odour of bile; in fact, it appeared only to differ from that fluid in being more liquid. On laying open the cavity, the intestines were found roughened, as in the first stage of acute peritonitis, and some shreds of coagulable lymph were found floating in the dark bilious fluid in the pelvis. The omentum did not cover the small intestines. The liver was seen with a laceration extending in the direction taken by the broad ligament, quite through its substance, and to a depth from the thin edge of two inches and a half; another laceration extended about two-thirds of the length of the convex surface, in a transverse direction; this was of a comparatively slight depth, and was in a state apparently advancing towards reparation. There was no effusion of lymph on the peritoneal surface of the liver, excepting about the lacerations. On raising the free margin of the liver, the omentum was

found rolled up in a mass underneath it, and slightly adherent; it was of a dark dusky colour, and on attempting to unroll it, was perfectly brittle, and gave way under the least pressure; the neighbouring portion of the transverse colon was of the same colour and nearly as fragile. The gall bladder was found ruptured above, but near the junction of the hepatic with the cystic duct, at a spot in immediate relation and in contact with the mass of omentum above described; it was quite empty and contracted. On removing the liver, a large spot of ecchymosis was found on its under surface, nearly corresponding to the rounded sides of the bodies of the vertebræ: when cut through it was found filled with semi-coagulated blood.

A transverse section of the liver being made, a portion of it, about three inches wide, running quite through it, was found very red and denser than the surrounding hepatic tissue: the anterior termination of this red band was in the laceration first mentioned.

The right kidney was found enveloped in its usual fatty investment, which was infiltrated with blood. None of the other abdominal viscera seemed to have suffered violence. On the left side there were marks of effusion of blood, and ecchymosis about the diaphragm, and on the pericardium. Both lungs and the heart were perfectly healthy, excepting that the lower tip of the left lung was brittle and full of serum.