

Death, then, was evidently due to septic peritonitis as a direct result of intestinal perforation, and although cases are on record where recovery took place almost identical with this under consideration, yet they occurred in young subjects, (one, particularly mentioned by Erichsen, I think, who died, however, two years and a half later from the formation of an abscess which opened into the renal artery). Here, even had the aperture in the colon closed by nature's energies, in all probability death would sooner or later have taken place from destruction of the kidney, which was intensely inflamed and twice its natural size. No hiccough appeared as a result of injury to the diaphragm, and throughout the entire illness there was but little evidence, either by examination of the chest wall or internal hæmorrhage of localized pneumonia. For four days before death the bowels were locked, but I particularly evaded giving a purgative, and justly so, because the bowel was penetrated, although, at the time, I was not sure of its being the case; but studying the track of the bullet from an anatomical point of view and knowing the kidney to be affected as demonstrated by blood in the urine, in consultation with Dr. Waugh the conclusion was that perforation had in all probability taken place, and that a laxative would remove the only chance for the patient's life, and even hasten his death. Although confronted by an old practitioner and strenuously opposed, even to almost losing the case, I was wise enough for once, fortunately, to resist the pressure brought to bear upon me. Had the ball struck an eighth of an inch external to the path it chose, the side of the eighth rib would have formed a bulwark against the inward direction, and the patient probably have been little the worse. Watching this case from the reception of the injury to the time of death, and taking into account the appearance of blood in the urine thirty-two hours after, with the rapid onset of the abdominal symptoms characterized by swelling, high temperature, tympanites and vomiting, the course of the ball was traced with a great deal of certainty, though before this time there were no symptoms to lead to the supposition that the kidney had been traversed or that the bullet had indeed gone further than the lung, for it was not until the morning of the third day (forty-eight hours) that peritonitis could be with any certainty diagnosed.

It may be asked, by some adventurous surgeon, why laparotomy was not performed in order to repair by suture the wounded gut, and to wash out the septic material infiltrated into the general peritoneal cavity. In my humble opinion this should not have been entertained for a single moment, in this particular case, for there were no symptoms, practically speaking, for forty-eight hours to show that the bowel had been perforated, except, of course, the hæmaturia, which has often been known to appear as a result of bodily exertion or some great mental emotion, or, perhaps, shock.

From the kidney there are four nervous tracts in connection with other parts, setting up symptoms that often throw considerable light on the locality of the pathological process. The vagus brings it into direct sympathy with the stomach, leading, as often happens, to irritation and vomiting; the spermatic plexus, derived from the aortic and renal sympathetic with the testicle accounting for the characteristic shooting pains complained of in calculus, nephritic colic, etc.; the benito-crural branch of the anterior second lumbar with the cremaster muscle and skin on inner side of the thigh; the anterior crural nerve in its distribution in the lower limb and the knee joint: but all these symptoms were negative, except the irritated condition of the stomach, which was refractory to reaction from the shock. Early examination of the urine would likely have shown albumen and even blood cells, but suppose it had done so, what benefit would the knowledge have been to a perforated gut, or even, for that matter, of injury to the kidney itself, so that a laparotomy could not have been performed until the third day with any knowledge that there was perforation.

Then, the necessity for the application of anæsthetic the second time, the severity of the operation and the great difficulty of finding the aperture in the colon, even had the bowel been distended with air, artificially, would have been most tedious and prolonged, and the reparative process in the abdominal parietes and gut unquestionably suffered from the condition of the affected kidney. But hæmorrhage had freely taken place in front of the spleen and beside the psoas magnus as well, and the whole tract of the bullet was, in all probability, teeming with septic material. Most certainly laparotomy gives favourable results sometimes in young subjects, or even adults with less