

## FATAL INJURY TO THE BLADDER DURING AN OPERATION FOR FEMORAL HERNIA.

By W. H. CLAYTON-GREENE, M.B., B.C. CANTAB.,  
F.R.C.S. ENG.,

SURGEON IN CHARGE OF OUT-PATIENTS TO ST. MARY'S HOSPITAL,  
PADDDINGTON, W.; SURGEON TO THE FRENCH HOSPITAL,  
SHAFTESBURY-AVENUE, LONDON, W.C.

With a Note by EDMUND OWEN, LL.D., M.B. Lond.,  
F.R.C.S. Eng., Consulting Surgeon to St. Mary's  
Hospital, Paddington, W.

As a considerable amount of attention has been directed recently toward cases of femoral hernia in which the bladder has been exposed or injured during operation, I think it well to forward the notes of a case with which I was concerned, though I was not the actual operator.

The patient, a married woman of spare frame, aged 47 years, and the mother of two children, had suffered for 23 years from a small femoral hernia on the right side. In October, 1901, the hernia became strangulated and a radical operation was performed for the relief of the condition. From that date to the time when further treatment was sought the patient had suffered from a constant dragging pain with occasional smarting in the region of the wound. There was a distinct bulging in the region of the femoral canal; no urinary symptoms were present. A second operation was performed on June 5th, 1902, and considerable difficulty was experienced in finding the sac; eventually it was distinguished, freed, twisted, and ligatured, and the crural canal was closed by a stitch. During the night the patient was restless but not in great pain. She took nourishment well but was sick several times. As she did not void urine naturally a catheter was passed and several ounces of normal urine were withdrawn. She did not seem well and during the next day (the 6th) she complained of pain in the right axillary region and she vomited during the afternoon. The catheter was passed in the evening and five ounces of normal urine were withdrawn. Towards night she became worse; the respirations grew shallow and hurried and there was severe pain in the epigastric region, spreading down the right and left sides. Dulness was found at each pulmonary base, with tubular breathing and friction sounds. A double basal pneumonia with diaphragmatic pleurisy were diagnosed. The abdomen was not distended and it moved well with respiration. There was tenderness over the epigastric region but not over the pelvis. During the night she began to hiccup. On the morning of the 7th she was worse and there was an extension of tubular breathing towards both axillæ. The respirations were 36 and the pulse was 140. Signs of fluid were detected at the right base. The urine had been drawn off at regular intervals and it was noticed that a very small amount was now being passed, so the question of bladder injury was raised. The urine was tested and was found to be full of urates, but the test for blood was negative. The abdomen was now distended, though it was still moving well; eight ounces of boric acid solution were injected into the bladder, one ounce only being returned. A few blood corpuscles were found on microscopical examination. It was now clear that the bladder had been injured and a further operation was suggested to her. This she declined, however, and she died during the early morning of the 8th.

At the post-mortem examination there was found a circular patch of necrosis in the bladder wall which lay about one inch from the neck of the sac. (The sac had been twisted.) There was general peritonitis, together with double pneumonia and a small right-sided empyema.

It is necessary to allude to one or two features of special interest in this case. There can be little doubt that the previous operation, by the removal of redundant sac, had caused a dragging on the bladder and had enticed it towards the hernial orifice. When the sac was twisted the bladder was, as it were, sucked into the vortex and surrounded by the ligature. It would therefore appear probable that injury to the bladder is more likely to occur in cases of recurrent femoral hernia and that the plan of twisting the neck of the sac is never devoid of danger.

The anomalous character of the symptoms are explained by the fact that, as the patient was put back to bed with the pelvis raised, the urine escaping from the bladder gravitated

towards the under aspect of the diaphragm and produced a train of symptoms very different from those which might otherwise have been expected. How soon the bladder wall gave way we had no means of determining, but presumably within 24 hours of the operation urine had begun to track towards the diaphragm. The only symptom which should have directed attention to the bladder at an earlier date was the small quantity of urine that was being passed. As the thoracic symptoms were so pronounced it was at first concluded that the toxic effects of a double pneumonia were being exerted upon the kidneys and that there was partial suppression.

*Note by Mr. EDMUND OWEN.*—Since attending the meeting of the Medical Society of London on Oct. 28th, I have been enabled to refer to the *Thesis* on the subject of crural cystocele, which M. Morin laid before the Medical Faculty of Paris, 1897. In it he says that before operating on the hernia it is generally impracticable for the surgeon to make a correct diagnosis, but that even to have a suspicion of the possible presence of the bladder is a bit of good fortune, and that if during the operation the hernial sac seems to be unusually thick on the inner and hinder part, one ought at once to think of the bladder. M. Morin is probably right in believing that pregnancy has a good deal to do with the spreading of the bladder thinly over the back of the lower part of the front abdominal wall, and with encouraging a small pouch of it to wander through the crural opening. And if when such a thin-walled bladder is lying close against, or is adherent to, a hernial sac, the surgeon has the sac pulled forward in order that he may the more securely tie its neck, disaster is apt to happen. After hearing the discussion at the Medical Society, I am quite willing to fall in with Morin's conclusion that cases of crural cystocele are not of such uncommon occurrence as one might have believed. And I am inclined to think that he may have some truth on his side when he says that there are certain surgeons who, when operating on a case which has turned out disastrously, dislike having their name associated therewith, and would strongly object to publishing the details of it, however useful they might prove to others. Such conduct shows a sad want of surgical courage. And, as one result of it, I should think that if anyone outside of our profession ever reads *THE LANCET*, he must put that journal down in the firm belief that every surgical patient gets well after being operated on, and that an operation is the one and only remedy. There is at the present day scarcely ever the suspicion of a black border around the report of surgical cases!

## TREATMENT OF INNOCENT LARYNGEAL GROWTHS BY THE GALVANO-CAUTERY.

By ANDREW WYLIE, M.D., C.M. GLASG.,

ASSISTANT SURGEON, CENTRAL LONDON THROAT AND EAR HOSPITAL.

INNOCENT laryngeal growths, such as papillomata and fibromata, grow from any part of the larynx but are most commonly found attached to the cords and ventricular bands. The ordinary methods of treatment for such growths are to remove them by forceps, curettes, snares, galvano-cautery, caustics, or by external operation. One of the most popular methods is by means of laryngeal forceps, of which several different sizes, shapes, and patterns have been invented appropriate to variously situated growths. The forceps are specially suitable for sessile growths situated on the edge of the vocal cords; the snare is the instrument for pedunculated growths in the anterior commissure, while the galvano-cautery is very suitable for minute sessile growths situated on the mesial surface of the vocal cords or ventricular bands. Chemical caustics are not recommended and external operations are only performed when it is found impossible to remove the growths *per vias naturales*. The use of the forceps often causes injury to the surrounding parts of the larynx, especially when removing a small sessile growth, since they obstruct the view of the larynx and also are powerfully gripped by the glottic sphincters almost as soon as introduced. The galvano-cautery burner being thin and light can be guided and observed during the whole of the operation.

Most writers dismiss the treatment of benign growths