It was that of a man with a chronic stricture and perineal fistula, where a silver catheter had been forced in by a surgeon and the passage gradually dilated up to No. 12 (English). The patient wore day and night a soft rubber catheter and he died after a few years of renal disease. After death it was found that the catheter had left the urethra at the front end of the stricture and had tunneled a new passage through the prostate alongside the proper urethra. I found an epithelial growth on the bladder where the catheter had rested and the false passage was lined with a smooth, shining membrane and answered the purpose of a catheter fairly well."

The other case was that of a man with an old stricture where a false passage had also been previously made. Mr. Cadge wrote: "I used to pass a No. 8 or 9 through the false passage but I felt sure it was a false passage and as he lived a long way from Norwich I put him in the hands of another surgeon nearer him who, with much care and pains, got in a minute soft catheter through the stricture, kept it in, and in a fortnight he was able to use No. 12 flexible and the patient, I believe, has never had any trouble since." Mr. Cadge further remarks: "So far as my experience goes there is always one sign of a false passage present—viz., when a large catheter is passed and removed the false passage quickly or almost at once collapses and the patient cannot pass urine much better than before any instrument was used."

These two narratives were sent to me by Mr. Cadge in response to the written particulars of the following case about which I was desirous of hearing from him. It was that of a middle-aged man whom I saw some time ago and who had an old tight traumatic or scar stricture and a false passage beneath it from the bulbo-membranous urethra tunnelling the floor of the prostate and so entering his bladder through the trigone. The lesion or false route seemed to correspond with the first case described in this paper of which I made a drawing (see illustration).

A, The prostate gland. B, Catheter, leaving the urethra in front of the stricture, passing through the prostate and entering the bladder. C, Entrance of the stricture.

For some time treatment had consisted in what was supposed to be dilatation of the stricture by the passing of metal bougies. Later I was asked to see this patient and I also repeated this process but with the feeling that there was something wrong in the direction of the instrument. Subsequently with a set of filiform bougies and fine "whips" I hit off the way through a long stricture immediately in front of the prostate and entered the bladder naturally. It was clear then that there were two ways to the bladder through the prostate, one by the natural course guarded by a very contracted stricture, and another which had been artificially made, so to speak, for occasions of great and recurring urgency. How to close the one and to open the other was the point to determine. The stricture was much too scar-like and contractile to yield to dilatation, continuous or otherwise. Guided by some experience in similar cases it appeared to me that this would be best secured by the combined operation of internal and

external urethrotomy.¹ This was effected in the following manner, which was planned to avoid adding unnecessarily to the amount of scar tissue in relation with the urethra. By using a fine Holt's dilator introduced on a filiform guide the stricture was stretched so as to permit of a Maisonneuve's urethrotome being passed by which the contraction was divided. In this way I at once enlarged the very contracted urethra sufficiently to enable me to introduce a fair-sized median grooved staff into the bladder. Upon this a perineal section was performed and one of my full-sized gum elastic drainage-tubes was put into the bladder along what had been for some years a closely contracted and unused half inch or so of urethra. The wound was closed with catgut sutures around the drainage-tube which was secured in the ordinary way. This patient made an excellent recovery and after many years' painful interruption again passes urine in a natural stream. He takes the precaution of occasionally using a bougie for himself.

In these cases where the deep urethra is involved in dense masses of cicatricial tissue, mainly the result of disease or injury, or both, and where perineal fistulae are also present the combined operation is, I believe, the surest treatment. The possibility of such a complication existing as here described must not be entirely lost sight of in connexion with the symptoms presented in certain forms of deep urethral stricture. In the instances which have come under my observation it was found possible to demonstrate that the normal canal, though in an extremely contracted form, did exist. Further, the cases narrated tend to show that with care and patience it is possible to restore the dimensions of the natural canal by dilatation or otherwise even after long periods of disuse and also permanently to obliterate the false route or passage.

Lower Berkeley-street, W.

COLLES'S FRACTURE AND OTHER FRACTURES AND DISJUNCTIONS AT THE LOWER END OF THE RADIUS AND ULNA.²

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THE term Colles's fracture ought to be confined to those fractures of the radius close to the wrist-joint in which backward displacement of the lower fragment occurs. It has, however, been loosely applied to all fractures in the vicinity of the joint. The ordinary form of Colles's fracture is usually produced by falling on the hand in the three-quarters pronated position and not, as is commonly stated, in the fully pronated position. It is usually stated that the accident is most common in women of an advanced age. In the series of 69 cases 54 per cent. occurred between the ages of 30 and 50 years, and only 38 per cent. after 50 years. The largest number (17 cases) in any decade occurred between 30 and 40 years and 12 of these were males, although taking all the cases together the numbers were 28 males and 29 females. About 50 per cent. of the women were over 50 years of age, while only 25 per cent. of the men were over that age. In the men, therefore, 75 per cent. of the fractures occurred before 50 years. The side affected was noted in 47 cases: 27 fractures were on the left side and 20 were on the right side. In most of the cases the injury was situated within the last inch of the bone. The series of sections of bone sawn from side to side and from before backwards shows that the compact tissue ceases about one inch from the tip of the styloid process on the outer side and about three-eighths of an inch from its lower end on the inner side. Behind, the compact layer descends to within about half an inch of the joint and in front a line or two further down.

¹ THE LANCET, June 11th, 1898, p. 1611.

² Abstract of a paper read at a meeting of the Ulster Medical Society held on Feb. 2nd, 1905. It was based upon a series of 69 cases, of which 11 were disjunctions of the lower epiphysis of the radius. In illustration of his remarks, Mr. Fullerton showed a profusion of lantern pictures, skiagrams, ordinary photographs, museum specimens, and splints.

This accounts for the obliquity from above downwards and from without inwards, which is seen in a large number of the skiagrams. The presence of a spike of bone running up the shaft on the outer side is a marked feature in many cases. (Skiagrams were shown illustrating several unusual forms of fracture, including some of fracture of the radial styloid process alone extending into the joint on the inner side.) The ulna was implicated in over 50 per cent. of the cases. Skiagrams show that in fracture of the styloid process there is considerable variety among the results of treatment. In some this process unites again, in others it becomes thickened, in others it remains distinct, and in others it disappears altogether. In some of the cases fracture of the ulna at the same level as the fracture of the radius was found. Complete separation of the radius and the ulna with probable rupture of the triangular fibro-cartilage takes place in many cases. Fracture of the styloid process of the ulna alone may occur in injuries about the joint, as for instance, when the carpus is dislocated backwards.

The presence or absence of impaction was noted in 45 cases. In 12 there was marked impaction, two of these cases being fractures of both bones at the same level and in others there were probably some posterior impaction and some crushing of the fragments. In all these fractures a good result was obtained by manipulation and splints. Comminution as seen by skiagrams was present in five cases out of 47; it may have occurred in others but was not diagnosed either by skiagrams or by symptoms.

The displacement of the fragments and consequent deformity were carefully noted in all the cases and have been classified under the following three heads. 1. Those in which the lower radial fragment is displaced backwards, this being by far the most frequent form of the injury. 2. Those in which displacement of the lower fragment outwards is the most marked feature. In these cases the patient has probably fallen on the ulnar border of the hand. 3. Those in which forward displacement occurs, this being a very rare form of the injury. The description in text-books in which abduction of the hand is given as a sign of these fractures is open to great objection. In most cases the fingers are either in the normal position or are slightly flexed to the ulnar side, so that adduction of the fingers and radial displacement of the wrist would be a more suitable description. The cases in which there is narrowing of the interosseous space between the radius and ulna must be very rare; in several of those included in the series this space was actually widened in consequence of comminution of the lower fragment of the radius or separation of the radius from the ulna. In the cases with displacement to the radial side the wrist is broadened from side to side, suggesting a line of treatment different from that which is usually employed.

The complications that occurred in the series were as follows: fracture of the ulna at the same level, three cases; fracture of the styloid process of the ulna, 52 per cent.; rupture of the triangular fibro-cartilage allowing of separation of the radius from the ulna (comminution), five cases; injury to the median nerve, two cases; laceration of the tendon of the extensor secundi internodii pollicis by the ragged edge of the lower fragment, one case; fracture of the anatomical neck on the same side, one case; and fracture of a carpal bone (the scaphoid), one case.

In considering the treatment of these fractures it is essential to subdivide them according to the nature of the displacement. In dorsal displacement two splints ought to be applied, the anterior one not coming below the fracture and the posterior one being so padded that the hand is flexed to an angle of 45°. If there is impaction it must in all cases be first broken down, if possible, and the parts firmly pushed into position before the splints are applied. The recent suggestion that no attempt should be made to break down impaction or to employ splints is not to be recommended. The parts, however, ought not to be kept in splints for longer than a fortnight unless in very exceptional circumstances; the patients ought also to be visited every second day and encouraged to move their fingers. In the large majority of cases there was no stiffness of the wrist; when it occurs it is probably due to fracture into the joint or to injury of the carpal bones. In many instances the patients were able to return to their work in four weeks from the date of the accident. In those cases in which radial displacement is the principal deformity I have obtained good results by the use of a newly designed splint

consisting of a piece of wood hollowed out to fit the ulnar border of the hand and forearm and having its metacarpal end made at a slight angle to the remainder of the splint. When in position it fits the forearm and ulnar border of the hand and the latter is neither abducted nor adducted. The radial fragment is drawn or pushed into its place and kept there by a pad which is securely fixed by means of a buckled strap passing round the lower end of the splint. The object aimed at is to keep the lower end of the radius close to the ulna by the pressure of the pad and strap. The splint is a little broader than the ulnar margin of the limb, so as to leave room for the circulation of the blood and lymph. Dorsal and palmar splints are useless for the correction of radial deformity.

The 11 disjunctions of the lower epiphysis of the radius all happened in boys at ages varying from seven to 18 years. At that time of life Colles's fracture is much rarer than disjunction of the epiphysis, but among the skiagrams there is one showing Colles's fracture in a boy, aged 11 years. The cause is indirect violence, such as falling from a height upon the outstretched hand or falling in the street on the palm or ulnar border of the hand. Fracture of the tip of the styloid process was seen in one of five skiagrams that were taken. In one case the epiphyses of both the radius and the ulna were displaced slightly inwards as well as backwards. There is reason to believe that the ulnar epiphysis frequently suffers as well as the radial one, for a few days later there is often a swelling at the spot, due probably to a loosening of the ulnar head and consequent epiphysitis. Permanent deformity or arrest of growth is quite exceptional in these cases.

Belfast.

A CASE OF ACUTE HÆMORRHAGIC PANCREATITIS; OPERATION; RECOVERY.

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A MARRIED woman, aged 26 years, was admitted into the Liverpool Royal Infirmary on Oct. 1st, 1904, with signs of intestinal obstruction. Her history was that except for constipation she had always been in the best of health. No history of indigestion, colic, or jaundice could be obtained. Her periods were quite regular, the last one starting six days before admission. She had had two healthy children. The patient stated that for the last year her constipation had been worse and that her bowels had not been opened more frequently than once a week and sometimes but once a fortnight. Early on the morning of Sept. 30th, whilst turning in bed to reach the baby, she was seized with a severe pain in the abdomen, as if "something had twisted." She had had no motion of the bowels for seven days but went to the closet and passed a small hard motion. The pain being now more severe she sent for a medical man who administered a small dose of morphine and an enema. During the day she had 12 enemata but passed nothing except a little flatus. She was sick ten times. On the day of admission she was sick twice but it was noticed that her abdomen was more distended. She reached hospital about midnight on Oct. 1st, nearly 46 hours after the "accident." Her condition on admission was as follows. She was a well-nourished, well-built woman, with an anxious expression, a dry mouth, and a very foul, furred tongue, which latter condition was out of all proportion to the severity of the case. Her abdomen was distended, there were signs of free fluid in the flanks, and there was a painful area in the epigastrium with localised swelling. Per rectum and per vaginam nothing abnormal was discovered. The pulse, which was 128, was feeble and fluttering. Her temperature was 96.2° F. It was obvious that some accident had occurred in her abdomen and the diagnosis was that of some gastric lesion, possibly perforated gastric ulcer.

The abdomen was opened in the middle line above the umbilicus and on dividing the peritoneum there at once issued a large quantity of bright blood mixed with serum. Probably three pints of free fluid were in the peritoneal cavity. The intestines were only moderately distended. Although her history negatived a ruptured extra-uterine pregnancy I examined the pelvic contents first and finding nothing abnormal proceeded to investigate the condition of