

required. Two days after the operation the look of suffering and anxiety had disappeared and he was very comfortable. Took food well without nausea or vomiting. Bowels moved four times, not much pain. Opiates were omitted on the third day, and he could lie on the right side, but not on the left without a dragging sensation. The wound was examined on the fifth day and found to be united. The superficial sutures were removed twenty-four hours later. They came out perfectly dry, their being no suppuration in their track. Tympanites gave no trouble after operation, the passage of flatus being free. The pulse and temperature came down to normal on the third day and has remained there. All through his convalescence the patient was troubled more or less with diarrhoea. Bismuth, calomel and opium did little good, but it improved greatly under the use of small doses of castor oil, and finally ceased.

Ten days after the operation there was a good deal of pain in the bowels for one day, which in the light of subsequent events I am inclined to ascribe to the peritoneal suture. In the course of a month the end of the deep suture appeared at the orifice of a small opening in the wound, and was removed. The silk had not been properly prepared, and hence it ulcerated out.

Six weeks after operation the wound was soundly closed, and the patient was up and about the ward feeling "first-rate," as he expressed it. Bowels regular, appetite good, and flesh and strength fast returning. The scar was an inch and a half in length, and apparently firm and solid. The indications at present are favorable for a complete restoration to health.

Speculations as to the future of this case are of little value, as it is impossible to say with any degree of certainty what may take place at the seat of the affection. It is possible that a stricture may develop, or new adhesions form followed by their characteristic symptoms. We all know the insidious nature of peritoneal bands and adhesions, that they may remain latent for a long time, and then without any apparent cause, develop a remarkable activity for mischief. Something of this kind may appear in this patient at almost any time, but the fact remains, that whatever the future may have in store for him, he has been rescued from a very dangerous condition by this operation, and possibly he may be again relieved by surgical measures should the occasion demand them.

Another point is worthy of notice in this connection and that is the following: If adhesions of the bowels to the abdominal walls can be destroyed mechanically, why may not those, which unite the coils of intestines with each other, or with the omentum? Extensive adhesions of the various pelvic and abdominal organs are frequently broken up in removing tumors from the peritoneal cavity, and with the exception of those involving the stump of a pedicle, or excised mesentery, they seldom re-form or give future trouble. A peritoneum which is recovering from a recent attack of inflammation is probably less susceptible to irritation, and hence bears operative procedures much better than it would in its normal state. The operation under these conditions may be looked upon as a secondary one, and hence freer from danger than a primary one would be. Should time prove these statements to be true, then it would seem reasonable to hope that benefit may be obtained by surgical measures in certain cases of peritoneal adhesions not amenable to other

methods of treatment. Observation and experience must determine the class of cases, if any there are, which may be relieved by operation. The extent of the attachments, their duration and strength, their location, the organs involved, the general condition of the patient, the urgency of the symptoms, are important points and require consideration. It would seem that in these days of antiseptics, when the peritoneum is no longer sacred to the eye or to the manipulations of the surgeon, the questions suggested above are worthy of further experimental observation.

INJURIES OF THE SHOULDER.¹

BY J. H. MCCOLLOM, M.D.

No attempt will be made in this paper to bring forward anything new in the treatment of injuries to the shoulder, but I have thought that it might be of interest to briefly report a few cases of dislocations which were under observation a much longer period than is usual, and in which the results were not as satisfactory as might be desired, and will also add three other cases of comparatively rare injury to the shoulder. These injuries are to be divided into fractures, dislocations, separation of the epiphyses and impairment of the function of the nerves supplying the part, particularly that of the circumflex. Contusions are only of importance from their liability to mask other and more serious injuries. The discussion of fractures about the shoulder-joint is beyond the scope of this paper. The remark is frequently made that a dislocation of the head of the humerus is a comparatively trivial injury, and that the result of the treatment is all that could be desired both by the patient and by the surgeon. Now while this is true in a certain proportion of cases, there are still many instances of properly-reduced and skillfully-treated luxations which are a source of annoyance to the surgeon and of trouble to the patient. It may be stated as a principle that the more muscular a patient the greater is the likelihood of trouble following the dislocation; the reverse may be said to be true of fractures. A word in regard to partial dislocations. When we take into account the shape of the glenoid cavity, the conformation of the head of the humerus, the powerful muscles which surround the joint and the laxity of the capsular ligament, it is extremely doubtful if these ever occur. How is it possible for the rounded head of the bone to remain upon the narrow rim of the glenoid cavity? It is true that the long head of the biceps may in some way prevent the head of the humerus from being thrown very far downwards or forwards, but if the head of the bone leaves the socket why should it not be called a complete dislocation? Concerning the subject of ancient dislocations so-called I have nothing to say; but the following account of the reduction of a luxation of four years standing, published in the "International Encyclopedia of Surgery," Volume 3, page 671, is unique and quite interesting. "Mr. B., a patient of Dr. Rice, a prominent physician of La Moille, Ill., met with an accident in November, 1877, by which he dislocated his shoulder. The patient, who was a farmer, failed, for some reason to obtain proper treatment, and applied after eighteen

¹ Read before the Boston Society for Medical Observation, November 1st, 1886.

months to Dr. Rice, who discovered the true nature of the injury and made patient efforts to reduce the luxation. After using as much force as he dared, this physician pronounced the case beyond cure and advised that no more hope be entertained of replacing the bone, as no nerves seemed pressed upon and as the arm was still measurably useful to the patient. In November, 1881, four years after the injury, the man was riding upon a horse and at the same time leading a blind horse behind him by a halter which he had carelessly wound about the hand of the arm dislocated four years before. While in this position the animal behind, becoming startled, suddenly jumped back, and Mr. B., who was unable to release his hand from the halter strap, was dragged forcibly backward, so that the traction was both backward and as he leaned further back somewhat upward. The shock of this sudden strain was so severe that the patient was taken to his house and placed in bed, it being believed by himself and others that he was seriously hurt. He slept for some hours, the pain not being severe, and upon awakening discovered that his arm was changed in some way. Further examination showed that the luxation had been reduced and the member soon recovered its mobility, and nearly its old strength."

In regard to the separation of the epiphyses it may be observed, that these injuries almost invariably do well if they are recognized. The local disturbance, however, is frequently so trivial that no physician is called, and the first thing noticed by the patient is a deformity, which, although comparatively slight, not only mars the symmetry, but also interferes to a certain extent with the motion of the joint. It is impossible in the greater proportion of cases, to make a correct diagnosis without ether.

CASE I. Miss A. B., forty-five years of age, while attempting to go down stairs lost her balance and endeavoring to save herself, seized one of the balusters with her right hand causing a dislocation of the humerus into the axilla. When the patient was seen, which was about one hour after the injury was received, she complained of pain near the joint, which was immovable and very sensitive to the touch. As the patient was very fleshy and as the bones were quite small, the deformity was very slight, so slight that a casual glance would not have detected any difference in the contour of the shoulders. There was no numbness of the fingers, and in fact, with the exception of the severe pain when any motion, passive or otherwise, was attempted, there was nothing that would indicate any severe injury of this joint. The patient was etherized, when it became evident by the application of the test of Dugas that there was dislocation of the head of the humerus into the axilla. The reduction was accomplished with very little difficulty. A pad was placed in the axilla and an immovable apparatus adjusted. There was considerable constitutional disturbance as is nearly always the case in these injuries. The apparatus was kept on the shoulder for two weeks, at the end of which time slight passive motion was commenced and continued at intervals of a day for three weeks. There was no difference in the appearance of the joints, but the motion was very much limited in the injured one. At the expiration of four years, the patient was unable to place the hand easily upon the top of the head, and in fact, has never fully recovered the use of the joint.

CASE II. J. T., a man fifty-eight years of age, was riding in a stage-wagon when the axle broke and the vehicle was overturned and the patient was at the bottom of a confused mass of humanity. The exact manner in which the accident was caused it is impossible to state. An eminent surgeon of New Hampshire was called, who administered chloroform, diagnosed a downward dislocation of the humerus which he easily reduced. The patient came under my observation twenty-four hours after he received the injury. When seen there was considerable swelling about the joint and very great constitutional disturbance. As the patient had travelled over one hundred miles the apparatus had become disarranged. Adhesive plaster, wedged-shape pad and bandages were applied, so as to render the joint immovable. Opium was administered and the patient placed in bed. At the end of two weeks the apparatus was removed and passive motion was used every day. There was no wasting of the deltoid. The man never fully recovered the use of his arm. Up to the period of his death, which occurred five years later, he was unable to raise his arm at more than a right angle to the body. Rotation of the humerus, however, was comparatively good. There was more or less neuralgic pain, however, as long as the patient lived. There was a slight prominence in the anterior portion of the joint, the cause of which has never been satisfactorily explained. Hamilton in his work on dislocations and fractures, speaks of this deformity as of very frequent occurrence after dislocations, and attributes it to the injury of the long head of the biceps; but as the long head of the biceps is comparatively rarely injured in dislocations it would seem as if this conclusion was erroneous. Other observers consider that it is due to the injury of the spinatus muscles and probable thickening of the capsule.

CASE III. A man, about forty years of age, was standing on a ladder about eight feet from the ground, when the foot of the ladder suddenly slipped and he was precipitated from this height, and put out his left arm to save himself, thereby causing an axillary dislocation. When seen, which was about three hours after the accident, there was a deformity characteristic of this dislocation. As the man was of a very spare habit, the diagnosis could be made at a glance. The patient was etherized, and the dislocation was easily reduced by means of placing the heel in the axilla. A pad was placed under the arm, which was firmly bandaged to the side. There was very little constitutional disturbance, and the subsequent swelling and inflammation of the joint were very slight.

The bandages were removed, and passive motion commenced at the end of two weeks. At the expiration of six months, although the motion of the joint was comparatively good, the man did not have free and perfect use of the arm. There was no change, however, in the appearance of the injured joint, as compared with the other. The limited amount of pain in this case is of interest when compared with the severe pain in the previous cases.

CASE IV. J. G., a man about fifty years of age, standing at the door of a saloon, was suddenly pushed down two steps, causing an axillary dislocation of the right humerus. It was impossible to discover just how he received this injury. When the patient was seen, he was somewhat under the influence of alcoholic stimulants. There was comparatively slight deformity,

but as there was great pain and tenderness about the joint, sufficient to render an examination without an anæsthetic impossible, he was etherized. A dislocation diagnosed and easily reduced. The usual apparatus was adjusted and kept in place for ten days. The patient stated that four years previous, he had received a similar injury to his arm. At the end of three weeks, at which time the patient passed from observation, there was comparatively good motion of the joint.

CASE V. A. B., while in a state of intoxication, fell on the sidewalk, and in some way dislocated his shoulder. When the patient came under observation, which was three days after the receipt of the injury, there was great swelling about the joint, so much as to mask the characteristic deformity, accompanied with very severe pain and marked constitutional disturbance. The man was etherized, and the dislocation reduced. Œdema of the hand and numbness were present in a marked degree. At the end of a week the swelling was very much diminished, but, unfortunately, at this time the patient disappeared.

CASE VI. A woman, thirty years of age, was knocked down by the horses of a street-car, and received an injury of the right shoulder-joint. The patient was seen about an hour after the accident. There was loss of power, numbness of the hand, and severe pain in the shoulder. The deformity of the joint was not very marked, but on account of the pain, a satisfactory examination could not be made without an anæsthetic. The patient was placed under the influence of ether, and the diagnosis of a downward dislocation made. This was easily reduced, and the usual apparatus adjusted. At the end of two weeks passive motion was commenced. In this dislocation, as is frequently the case, there was wasting of the deltoid, and also marked inflammatory thickening of the capsule of the joint. At the end of six months the movement of the joint was much impaired, although there was very little pain. A slight prominence on the anterior aspect of the joint was very evident. The deltoid muscle was considerably smaller than the one on the opposite shoulder. At the end of a year there had been very little improvement either in the appearance or motion of the joint. At the end of four years the motion was not perfect, but it had improved slightly. The patient could now place the hand upon the vertex, but she was unable to place the upper part of the arm in contact with the side of the head. There was considerable loss of symmetry. For all usual avocations, however, this arm was nearly as useful as the other.

CASE VII. A. B., a man thirty-five years of age, fell on an icy sidewalk, and while trying to save himself by grasping the railing of a fence, caused a downward dislocation of the left humerus. The patient was seen about one hour after the accident. He was etherized, and the dislocation easily reduced. The usual apparatus was applied, and at the end of two weeks was removed. There was very little constitutional disturbance in this case, and the swelling and pain in the joint were comparatively trifling. At the end of four weeks there was a fair amount of motion in the joint, but there was very marked deformity on the anterior portion of the shoulder. Allusion has been made to this deformity in Cases II and VI. So great was this enlargement, that a superficial observer might mistake it for a dislocation. The head of the bone in this case

was certainly in the glenoid cavity, because the motion of the joint, although limited, was perfectly free and unembarrassed. The hand could be placed upon the opposite shoulder, and the inner elbow brought in contact with the thorax. A rule placed upon the arm projected about three-quarters of an inch from the acromion. At the end of three years the deformity had somewhat diminished, but the motion of the joint was still quite limited. Without multiplying cases, it has been shown, I think, that a dislocated shoulder-joint rarely, if ever, fully recovers its functions. It may be of interest, before finishing this subject, to allude to a remarkable result of a dislocation of the humerus, described by Baron Larrey in "Cooper's Surgical Dictionary," page 314: "Among the curious anatomical preparations (says he) which I saw in the cabinet of the University of Vienna, there was a dissected thorax, shown to me by Professor Prokaska, in which the whole orbicular mass of the head of the right humerus, engaged between the second and third true ribs, projected into the cavity of the chest. This singular displacement was the result of an accidental luxation, occasioned by a fall on the elbow, while the arm was extended and lifted from the side. The head of the humerus, after tearing the capsular ligament, had been violently driven into the hollow of the axilla, under the pectoral muscles, so as to separate the two corresponding ribs and pass between them. The diameter of the head of the bone surmounted this obstacle, and penetrated entirely into the cavity of the thorax, pushing before it the adjacent portion of the pleura. Every possible effort was made in vain to reduce this extraordinary dislocation. The urgent symptoms which arose were dissipated by bleeding, warm bathing, and anti-phlogistic remedies. The arm, however, remained at a distance from the side, to which condition the patient became gradually habituated, and after several years of suffering and oppression, he at length experienced no inconvenience.

"The patient was about sixteen or seventeen when he met with the accident, and he lived to the age of thirty-one, when he died of some disease which had no connection with the dislocation. His physicians were anxious to ascertain the nature of this curious case, of which they had been able to form only an imperfect judgment. They were much surprised to find, upon opening the body, the head of the humerus lodged in the chest, surrounded by the pleura, and its neck closely embraced by the two ribs above specified. They were still more astonished to find, instead of a hard, spherical body covered with cartilage, only a very soft, membranous ball, which yielded to the slightest pressure of the finger. The cartilage and osseous texture of the whole portion of the humerus, contained within the cavity of the chest, had entirely disappeared. Of the humerus, there only remained some membranous rudiments of its head, and a great part of these seemed to belong to the pleura costalis."

WASTING OF THE DELTOID.

CASE I. J. G., a man about forty years of age, fell on the sidewalk and injured his right shoulder. About three weeks after the injury he applied for treatment. At this time there was considerable pain on motion of the joint, and its movement was very much embarrassed. In order to prevent any possible error in diagnosis, the man was etherized, and a very careful examination was made. No fracture nor dislocation

could be detected. There was considerable diminution in the size of the deltoid muscle. A stimulating embrocation was advised, together with frequent champing of the joint. At the end of a week after the commencement of treatment, the thickness of the deltoid had diminished considerably. Electricity was now advised, in the form of the interrupted current. The man was under observation about eight weeks, at the end of which time the condition of the deltoid had not improved. There was complete paralysis of this muscle.

SEPARATION OF THE UPPER EPIPHYSIS.

This is spoken of by the authorities as a very rare accident, and were it not for the fact that a most careful examination had been made, I should be inclined to think that there had been an error in diagnosis.

CASE I. B. D., a boy, twelve years of age, was forcibly compressed between a high-board fence and the tail-board of a wagon, the wagon being brought in contact with his left shoulder. He was seen about one hour after he was injured, at which time there was a deformity in the anterior portion of the shoulder, just below the coracoid. When one hand was placed upon this projection, and rotation, with a slight upward pressure, made with the other, a peculiar, soft crepitus could be felt; when rotation was made outwards, this prominence moved slightly, but seemed to pass through the arc of a comparatively small circle. The forearm could be flexed and extended, both pronated and supinated without pain. Slight pressure downwards and backwards caused this deformity to disappear. There was comparatively little pain about the joint, so that a satisfactory examination was made without ether. An Ahl's shoulder-cap splint was moulded to the part, with a soft pad so adjusted as to bring firm, yet moderate pressure over the deformity. The arm was bandaged to the side. At the end of two weeks the splint was removed, in order to make an examination. Slight passive motion did not cause a recurrence of the deformity. The splint was re-adjusted, and at the end of ten days was removed. Slight passive motion was employed, the deformity did not return, and the patient had ultimately perfect use of the joint.

CASE II. A girl about six years of age, of a somewhat strumous diathesis, was forcibly thrown against the side of a house, and received an injury of the left shoulder. She was seen about an hour after the accident. There was slight swelling of the shoulder, and the characteristic deformity, to which allusion has been made in the preceding case, was observed. Owing to the slight amount of pain, an examination was possible without ether. Shoulder-cap splint was adjusted and kept in position three weeks. Passive motion was now used for a short time. The girl recovered perfect use of the joint, and there was no lack of symmetry in the shoulders.

My reasons for considering that the two preceding cases are examples of this injury, rather than fractures, are the peculiar appearance of the deformity, which is a distinct prominence just below the coracoid; a peculiar, soft crepitus (if I may be allowed the term), which is entirely different from the rough, grating feel, characteristic of a broken bone; the comparatively trivial pain, which rendered satisfactory examination of the joint possible without etherization; and the fact that at the end of three weeks, the union of the separated parts seemed to be perfectly firm.

Reports of Societies.

BOSTON SOCIETY FOR MEDICAL OBSERVATION.

MEETING, November 1st, 1886. DR. A. N. BLODGETT in the chair.

DR. G. W. GAY read a paper upon

A CASE OF LAPAROTOMY FOR RECENT ADHESIONS OF THE INTESTINES TO THE ABDOMINAL PARIETES: RECOVERY.¹

DR. RICHARDSON said that the paper was suggestive in bringing forward the question, What circumstances justify laparotomy? In some cases there can be no doubt, but in a large proportion the operation has to decide a doubtful point, and this is especially true of cases of obscure intestinal disease accompanied by obstruction. The severe cases of abscess about the vermiform appendix would be excluded from the list of doubtful cases. The speaker thought the practice of opening the abdomen to satisfy curiosity as to the disease and when nothing was to be gained further was altogether too common; he was sure that the success of over twenty laparotomies in his practice was such as to tempt him to perform the operation perhaps too freely. In the case reported, had the result been other than successful, it seemed to him the operation was justifiable when the percentage of mortality in similar cases left alone, was considered. While advising delay in operating in such cases of obstructive disease as did not present grave symptoms, yet one must be on his guard against delaying too long; in his own experience the delay of a few days in the case of a woman of seventy years, allowed her to become so exhausted that she died twelve hours after resection of the intestine, although the operation itself was perfectly successful, the joint holding both air and water.

DR. GAY said that the point on which he especially wished discussion was the one of most importance to the patients, that is, how much benefit is it to have peritoneal adhesions broken up. In cases of idiopathic peritonitis the patient may live for a long time suffering from adhesions, can he be cured by operating and breaking these bands? The question seems to turn upon the point as to whether these bands will re-form. It is known that they may not when only covering a comparatively small space. May not the same be true of very extensive ones? The limit of successful operations seemed to be between the two extremes of acute peritonitis, where the patient died of shock, and very severe cases where the patient was collapsed, and in the cold and sweating stage. He had operated in four cases when collapsed, but always with fatal result.

DR. BLODGETT asked the reader if the location of the intestinal adhesions in relation to their distance from the stomach would have any important bearing upon the result of treatment by operation? that is, if adhesions situated at a point upon the bowel nearer to the stomach would of necessity increase the perils of the patient either in the way of immediate shock during or after the operation, or would induce less favorable conditions during convalescence from the operation?

DR. GAY stated that the higher up the adhesions

¹ See page 25 of this number of the Journal.