

PART III.

MEDICAL MISCELLANY.

Reports, Retrospects, and Scientific Intelligence.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE KING AND QUEEN'S COLLEGE OF PHYSICIANS.

Multiple Abscess of the Liver—Evacuation by Puncture at the Epigastrium—Subsequent Irruption into the Pleura—Paracentesis, with Introduction of Drainage-Tube—Death. By THOMAS HAYDEN, F.K.Q.C.P.I., Physician to the Mater Misericordiæ Hospital.

(Read before the Medical Society, Dec. 18, 1867.)

FRANCIS WEBER, of German extraction, aged forty-four, was admitted into the Mater Misericordiæ Hospital June 26, 1867; had served twenty-one years as a soldier in the Presidency of Bengal, whence he returned to Ireland eighteen months ago.

Some months after arriving in India he had brain-fever, but, with this exception, had suffered no serious illness whilst there; had been liable to bilious attacks whilst in India, and since his return to Europe has been frequently "bilious."

About three weeks prior to the date of admittance he experienced a general and indescribable uneasiness in the region of the stomach, and in the back and shoulders; and a week subsequently he observed a prominence in the epigastrium; since then he has had frequent chills, but no regular rigor.

When admitted he was slightly icteric, thin and weak; the pulse was slow and feeble; bowels confined; he perspired at night, and lay only on his back; a prominence existed in the epigastrium, which was dull on percussion, as was likewise the surface to an extent of two inches below; tender, soft, and yielding to firm pressure, whilst above and to the right of this prominence the feeling yielded was that of a hard and solid body; the inferior right costal cartilages were pushed out, and hepatic dulness was extended upwards about two inches on right side, and in middle line.

From day to day the epigastric prominence increased in size, and yielded stronger evidence of the presence of liquid. On the 3rd July satisfactory evidence of adhesion to the abdominal wall having been obtained, and the liquid contents of the tumour having approached quite near the surface, a puncture was made with a sharp straight bistoury, and about a quart of grumous pus, mixed with some dark blood, was discharged.

As a means of evacuating the abscess, and subsequently of obliterating its cavity, a binder was previously applied, as in the operation for ascites.

For some days prior to the puncturing of the abscess the patient had been perspiring profusely; was weak, and required a sedative to procure even a short sleep; he had been taking a pill three times daily, consisting of extract of taraxacum, dried soda, and blue pill, in equal proportions. Nitro-hydrochloric acid was subsequently given in infusion of chiretta, eight ounces of wine and four of brandy were taken daily, and strong beef-tea with bread crumb for diet. The daily discharge from the opening made in the epigastrium was very considerable, of a dark flaky character, and gushed from the wound when the patient coughed. The right hypochondrium, which, previously to the performance of the operation, was remarkably prominent, subsided to its normal level; the tongue became clean, and the appetite and sleep improved. Such was the patient's condition on the 13th July. At four o'clock on the morning of the 14th he was suddenly attacked with acute pain in the lower portion of the right side, which deprived him of sleep. When visited on that morning he was suffering from sharp stabbing pain in the right side, which he referred to the infra-mammary and lower lateral regions on making a full respiration. This side was dull to within an inch of the nipple, and to the same extent vocal fremitus was absent; a loud friction sound existed laterally below the level of dulness; pulse 102, and sharp; *abscess discharging freely through wound.*

The diagnosis was at once made, of irruption into the pleural cavity, of an abscess distinct from that which had been opened in the epigastrium. The latter portion of the diagnosis was based mainly upon the continuance, in undiminished quantity, of the discharge from the abdominal puncture; to have one grain of calomel and three of James' powder every alternate hour; the side to be cupped in the seat of pain to three ounces, and subsequently covered with a warm poultice.

July 26.—Last night Dr. Curran, who was doing temporary duty for the Resident Clinical Assistant, Mr. Finnegan, was hastily summoned to Wöber about two o'clock, and found him struggling for breath, bathed in perspiration, and all but pulseless; the extremities were cold and clammy. Dr. Curran administered a stimulant draught, and the patient rallied. On making my morning visit I found him pale and haggard-looking;

pulse 132, and weak; respiration 36, and laboured; surface cold and moist, and the sheets, which only a few hours previously had been put on to replace others saturated with perspiration, were also quite wet from the same cause; urine free from bile; no jaundice; lower portion of right side was projected, and nearly motionless; intercostal spaces obliterated; dulness extended upwards to within two inches of the clavicle, and to the same extent vocal vibration was abolished, and respiratory sounds were absent, save by transmission; beneath the clavicle resonance was somewhat metallic; and here there was thoracic movement, and respiration was bronchial; dulness extending horizontally only to right margin of sternum; heart aching tumultuously. A large aperture, readily admitting the finger, had been formed by a process of sloughing in the site of the wound in the epigastrium, from which a flaky, ichorous matter was freely discharged, and when the patient coughed, burst forth with considerable force. Since last report cupping has been repeated with the view of alleviating pain, and blisters have been applied to the side; brandy has been given to amount of 10 to 12 ounces daily; there has been irritability of stomach, to allay which hydrocyanic acid was given with good effect.

Being apprehensive that the patient might die of asphyxia in the course of the ensuing night, if not relieved by paracentesis, I decided upon the operation, and had the advice and assistance of my colleague, Dr. Cruise, who agreed with me as to the urgency of the case, and the necessity for operative interference. The operation was performed at four p.m., as previously arranged, and in the following manner:—An incision was made through the integument and muscles in the seventh intercostal space, a short distance in front of the angles of the ribs, and through this a capillary trochar and canula were introduced. On withdrawing the trochar some dark brown serum escaped; and after a few seconds this became mixed with flakes of pus. It was at once decided to introduce Chassaignac's drainage-tube, which was accordingly done, with some difficulty, by means of the usual instrument, the counter opening being made also in the seventh intercostal space, about two inches in front of the primary wound.

A considerable discharge of pus took place through the tube; the patient felt relieved by the operation, and passed a comparatively good night; he took stimulants and light nourishment freely; perspiration was checked; respiration was less embarrassed; and the superior limit of percussion-dulness had descended an inch and a half on the following day; *but with this exception the percussion and stethoscopic phenomena remained unaltered*; the discharge from the drainage-tube was limited, and entirely purulent.

The relief obtained from the operation was only temporary, and on the second day succeeding the patient began to sink, and died of asthenia at

2.20 p.m., on the 30th July, *i.e.*, four days after the date of performance of the operation. The body was examined on the following morning. A large quantity of dark brown serum was found in the right pleural cavity, mixed inferiorly with thick, flaky pus; the mediastinum was pushed to the left, and the liver, covered by the stretched and attenuated diaphragm, projected into the thorax nearly to the level of the second rib; the lung was forced by the pressure of the liver, and of the liquid effusion, into the superior and posterior portion of the pleural cavity, and its apex was firmly attached to the cone of the pleura. There was likewise considerable serous effusion into the pericardium, and to a less amount into the cavity of the peritoneum. The liver was greatly enlarged, weighing, when removed from the body, 7 lbs. 2 oz.; it was of a dark chocolate colour in a few places, but elsewhere of the natural tint; the right lobe was elongated vertically, and on its anterior-superior surface was an abscess capable of containing an orange; this abscess was bounded superiorly by the diaphragm, which was firmly attached to it, and attenuated to the consistence of a thin film composed only of its serous investments; through this abscess, including its serous coverings, the drainage-tube had been passed; the cavity of the abscess contained a small quantity of thick, flocculent pus; its walls were rugged, and no communication with it existed, save that through the drainage-tube.

Another abscess of much greater magnitude was found on the posterior thick edge of the liver, occupying the notch for the reception of the vertebral column, and projecting into the pleura; it was invested by the diaphragm much reduced in thickness; was full of curdy pus; fluctuating on the surface, and manifestly on the point of bursting into the pleura; it had no communication with the former.

On the lower portion of the anterior surface of the right lobe, near the thin edge of the organ, and occupying in part the notch for the round ligament, was a third abscess, not extending deeply into the liver, but communicating with the wound made in the epigastrium, now much enlarged by the process of sloughing; this abscess was the smallest of the three, and had no communication with either of the former; it must have been of much larger size when punctured, as it then yielded at least a quart of pus.

The interest which this case possesses has reference chiefly to the diagnosis. Previously to the performance of paracentesis it was impossible to determine accurately the height to which the liver ascended in the chest; this was due to the attachment of the lung to the upper portion of the anterior wall of the thorax, by which it was prevented from receding before the encroaching liver, and yielded fallacious evidence in regard to the superior limit of the latter. The occurrence of pleuritis with effusion, consequent, in all probability, upon the escape into the pleura of a portion of the contents of one of the hepatic abscesses

on the morning of July 14th, increased the height of percussion-dulness by still further compressing the lung; and when the liquid was removed by tapping, the comparatively small quantity discharged, and the descent of the level of percussion-dulness by an inch and a half only, and without collapse of the side, showed plainly that the liver occupied the greater portion of the pleural cavity.

The question as to the necessity for paracentesis having been decided affirmatively, it was impossible, by physical examination, to determine the proximity of the liver; or, in other words, to distinguish the hepatic dulness from that due to the liquid effusion. Nor is it at all certain that, however much the penetration of the abscess by the drainage-tube may have increased the apparent gravity of the operation, its danger was thereby in any measure increased; for the tube, by affording a ready channel of exit for the matter, prevented its escape into the pleura; and the transfixion of the diaphragm, reduced as it was to its serous coverings, could scarcely be regarded as a complication in a case otherwise so serious.

Owing to the penetration of the abscess by the instrument used for the introduction of the drainage-tube, it was impossible to determine with certainty from *post mortem* evidence, whether the pleuritis was caused by the escape of matter into the pleura, or by the irritation due to the pressure of the abscess, separated as it was from the pleura only by a thin film of membrane; for, assuming the abscess to have given way, the small opening so made might have been occupied by the instrument either in passing into or out of it; and the small quantity of matter found in the pleura might have escaped into it from the tube. Nor was it possible to decide whether the trochar used in puncturing the chest had entered the abscess, because the opening so made might have been likewise occupied by the larger instrument subsequently introduced. I feel warranted, however, in concluding that the matter had found entrance into the pleura previously to the operation, and that the trochar did not enter the abscess, by a consideration of the following circumstances, viz., the *sudden* occurrence of acute pain in the side on the morning of the 14th July, followed, within a few hours, by the signs of effusion into the pleura; and, secondly, the escape through the canula, first, of clear serum, and then of pus, an order of events which should have been inverted, had the trochar, in the first instance, entered the abscess.

Rouis, as quoted by Frerichs, states that of 50 cases which occurred in his practice in Algeria, in which the abscess had passed beyond the boundaries of the liver, 11 had evacuated themselves into the right pleura; and Moorehead observed 14 out of 140, or 10 per cent., to open into the lung or sac of the pleura. Frerichs remarks:—"Most cases where the abscess bursts into the pleural cavity, terminate fatally," and that, with few exceptions, multiple abscesses are fatal. Out of a total of

84 cases Moorehead found 49, or somewhat more than one-half, to be multiple.

The abscess on the anterior surface of the liver was firmly attached to the abdominal wall, and had approached quite near the surface before it was opened. Owing to the strong evidence of adhesion that existed, consisting in redness, pointing, and yielding on the cutaneous surface, and immobility of the tumour during forced respiration, no fear was entertained of escape of matter into the peritoneum, consequent on puncture. Adhesion of abscesses so situate is not of common occurrence. Drs. Graves and Stokes remark:—"From our own experience we are disposed to consider adhesions between the parietal and hepatic peritoneum, in cases of abscess in the convexity of the liver, as of rare occurrence; a circumstance which presents a remarkable contrast with their frequency in the thoracic cavity."

In regard to the thoracic complications, and the difficulties in diagnosis to which they occasionally give rise, Dr. Moorehead remarks:—"It is important to know that there may be empyema existing with hepatic abscess, not caused by communication, but merely by extension of inflammatory action through the diaphragm, in individuals prone to the suppurative process. It appears, then, that empyema from communication, or independent of it, is not an unfrequent complication, and it sometimes renders the diagnosis of hepatic abscess obscure; the signs of the empyema may be attributed to the encroachment of the liver on the chest, or, if rightly interpreted, they may throw a doubt over the previous diagnosis of hepatic disease."

Gangrene, to a considerable extent, occurred round the puncture in the abdomen: this is a very unfavourable prognostic. Out of 16 fatal cases of puncture, in the practice of Dr. Moorehead, gangrene took place in 13.

PROCEEDINGS OF THE PATHOLOGICAL SOCIETY OF DUBLIN.^a

Dr. GORDON, President.

Bright's Disease of the Kidney with Cyst.—DR. LITTLE exhibited the kidneys of a man who had died in the Adelaide Hospital, where he had been a patient for the five weeks preceding his death. He was a large pale, heavy, flabby man, 65 years of age. He was a teacher of languages, and his illness commenced, a month before his admission, with rigors after exposure to cold and wet. When admitted he was weak

^a These reports are furnished by the Secretary to the Society.