

was that it might be caused by hydatid disease of the liver, but careful and repeated examination of the expectorated matters failed to discover any cysts or hooklets of echinococci. It was, therefore, necessary to seek further for an explanation, and it occurred to me that the cause must have been mechanical—i.e., an obstruction of the bile-duct. Now, such obstruction may have been produced either by pressure from without or from something within the duct itself. Pressure from without may have been caused by an abscess; but I was not inclined to adopt this theory, for the following reasons:—1st. Abscess of the liver is a disease seldom met with in this country, and still more rarely in a person who has not been resident in a hot or in a malarious climate. 2nd. Abscess of the liver still more rarely occurs without elevation of temperature and shivering, and no such symptoms were ever present in this patient in the several attacks of biliary colic which I attended during the two previous years. I was therefore reduced to the theory that the obstruction was within the duct, and probably caused by the impaction of a large gall-stone, from the fact that during the last few years the patient had had repeated attacks of biliary colic, and that in neither of the later attacks in which I attended her could any gall-stones be discovered after the pain passed away, although carefully and repeatedly searched for.

The next thing, if possible, is to decide as to the position of the obstruction, and the clue to this is furnished by the fact that the bile was never entirely absent from the motions.

It is probable that the obstruction was in the large duct leading from the right lobe, for the following reasons: (1) Any obstruction in the ductus communis would probably have been *total* to cause the bile to force a new passage for itself; that it was not so is proved by the circumstance that there was never any severe jaundice present during this or either of the previous illnesses, and that at no time was bile completely absent from the motions. (2) Any obstruction occurring in the left lobe would hardly account for the daily loss of such an immense quantity of bile. The obstruction must therefore have existed in the right lobe, and its *modus operandi* was probably as follows: the bile, having accumulated behind the obstruction, and failing of any other passage, set up inflammatory action and ultimate adhesion between the parietes of the liver and the diaphragm, followed by perforation and escape of the bile into the right pleura, finally making for itself a passage through the right lung.

There is little doubt that the escape was into the pleura and thence into the lung, and that the pleura acted as a reservoir for the bile; for if the communication had been direct into the lung the expectoration of bile would probably have been continuous, but this was not the case. Sometimes there was a cessation of bile expectoration for some hours, and on one occasion even for days; and after one of these intervals the attack was always preceded by the expectoration of bloody mucus, as if the parts had been temporarily healed and again forcibly separated. Again, before each fresh attack, dulness on percussion could be detected rising posteriorly for some inches; whilst after the paroxysm, by means of the stethoscope, fluid could be heard trickling and tinkling as if falling into a cavity during each deep inspiration.

With regard to the vomiting of pus I can only suggest that this may have been an effort of nature to remove the obstruction. An abscess must have formed, which opened into either the stomach or the duodenum, instead of seeking a passage through the fistula already established by the bile. I believe the abscess to have formed after the obstruction commenced rather than before, because the only evidence of shivering and increase of temperature which occurred throughout the attack was on June 3rd, exactly one week before the abscess first emptied itself.

The following points in this case are also worthy of notice: first, the small amount of constitutional disturbance caused by the continual loss of such an immense quantity of bile; secondly, the trifling irritation set up in the bronchial tubes by the constant passage of a foreign fluid through them. There was rarely any cough except at the time the bile was being expectorated, at which time it was most distressing, frequently lasting from twelve to twenty-four hours without cessation, and each cough accompanied by a mouthful of yellow froth.

The small amount of constitutional disturbance was shown by the remarkable manner in which the strength and the weight of the body were maintained throughout the entire

illness; by the fact that only on one occasion was there any rise in temperature or shivering (and that but for a few hours), and by the condition of the pulse, which rarely rose to 100 per minute, and then only during severe paroxysms of coughing.

The patient is at the present time in the enjoyment of excellent health, and has never since had a return of her former attacks of biliary colic.

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CASE OF SCIATICA, TREATED BY NERVE-STRETCHING.

By ALEX. W. MACFARLANE, M.D.

WITHOUT any desire to enter upon the consideration of the pathology and treatment of sciatica, I wish, while nerve-stretching is still on its trial, to record a case of that disease that was under my care last year for ten months, in which this method of treatment was successfully employed.

Mrs. X. is twenty-nine years of age. When sixteen years old she suffered from slight lateral curvature of the spine, which to a very slight extent still exists; and since that time she has occasionally suffered from spinal tenderness, which has always yielded to tonics and counter-irritation of various kinds. With this exception she has been a very healthy woman. She has never borne children, but has no uterine disturbance.

On the 26th January, 1877, I found her labouring under a very painful attack of sciatica, which had come on after a chill; and from that time until the 3rd November it was uninfluenced by treatment, although most perseveringly applied—locally, by morphia injected hypodermically, aconite, belladonna, opium, chloroform and cantharidine liniments, leeches, fly blisters frequently applied, acupuncture, hot douching, actual cautery, and galvanism; internally, by quinine, iron, chloride of ammonium, strychnine, arsenic, phosphorus, iodide of potassium, zinc, *actea racemosa*, turpentine in large doses, purgatives, &c. &c. These were all tried; and when I say "tried," I mean they were taken in full, even large, doses, and continued sufficiently long to show they were inert. The only improvement that took place was a transient one, when, at the seaside, she was having hot salt-water douches.

I was at last driven to propose stretching the nerve. Before undertaking the operation, Professor Gairdner, of Glasgow, who saw the patient, agreed with me that the list of remedies had been exhausted. I performed the operation, under antiseptic precautions, on Nov. 3rd, stretching the nerve thoroughly, though I failed to lift the leg off the table. The wound healed by the first intention. Since that time till now (July 3rd), more than eight months, not the slightest return of pain has been experienced.

This was a severe and protracted case, and a suitable one for testing the treatment; the result has been all that could be desired. I have stated that I performed the operation under antiseptic precautions, which to some may appear to have been unnecessary, as clean-cut wounds usually heal by the first intention. I submit, however, that such wounds, treated without antiseptics, may occasionally suppurate, and even endanger the patient's life; with the antiseptic treatment I believe this danger to be highly improbable, if not impossible. The lives of patients suffering from sciatica are not in danger, and nerve-stretching cannot yet be undertaken as a certain cure; therefore without antiseptics I should hesitate to perform this operation, that might possibly not effect a cure, and even endanger life. Such considerations, though apparently trifling, are of great consequence to patients, as it is important that they can be assured that, though the operation fail, their life will not be jeopardised.

Kilmarnock.

BEQUESTS ETC. TO MEDICAL CHARITIES.—Mrs. Elizabeth Burmester, of Devonshire-place, bequeathed £500 to the Middlesex Hospital, and £500 to the Hospital for Consumption, Brompton. The Rev. Augustus Clissold has given £500 to the Charing-cross Hospital. The All Saints Convalescent Hospital at Eastbourne has received £105 from the Prison Charities' Committee.