

converted by the operation into a pyo-pneumothorax. The improvement after the operation was only temporary, and in three weeks the patient was spitting up the same quantity of pus as before and was in much the same general condition, the temperature still not rising above the normal. It was then decided to lay the side freely open, which was done by extending the upper opening and passing a silver catheter through it to the sixth space posteriorly and cutting down upon its tip. The catheter carried a tape to which a drainage-tube was tied, and passed thus right through the pleural cavity from one opening to the other. A large amount of pus escaped. The chest was then covered with absorbent cotton-wool and picked oakum. The heart returned a little way towards the left after the operation. The expectoration diminished at once, and in the course of a week was hardly anything more than a little ordinary bronchitic sputum with an occasional small pellet of pus. The discharge from the wounds was at first copious, but rapidly decreased and remained throughout quite sweet, and the temperature never rose. The chest was syringed out twice daily with a 1 per cent. carbolic acid solution.

Ten days after the operation the expectoration had completely ceased, and the discharge from the incisions did not amount to more than three ounces in the twenty-four hours. Three days later the chest was filled rather too full of carbolic acid solution, and the patient coughed up a little of the acid, showing thus that the opening into the lung was still patent. One month after the operation the patient had gained four pounds in weight; the discharge did not amount to more than an ounce in the twenty-four hours. In the fifth week the upper opening was allowed to close, and in the seventh the lower also, the patient having been up and about the wards for the last three weeks.

On discharge, two months and a half after the operation, the patient was strong, well, free from pain and expectoration, and had no dyspnoea over a moderate exertion. The left side of the chest was much flattened, and feeble respiratory sounds were audible over the upper lobe back and front, but none below. The heart had returned slightly towards the left, and the liver dulness had risen to the fifth rib on the right upper line.

The patient has been seen several times since, the last time nine months after the operation, and was at work and quite well.

Remarks by Dr. WEST.—In this case an empyema had existed probably for nearly twelve months, and had been discharging externally and through the lung for about six months. The patient's health was good; there was no fever or hectic, and the nutrition was well maintained. Under these circumstances the question was raised whether it would not be wisest to leave well alone; but considering the patient's discomfort, and the fact that if an operation were performed his chances of recovery were greatest while his strength and health were good, it was decided to run the necessary risks and lay the side freely open. The rapidity with which the expectoration ceased and the side contracted are surprising in an adult of his age and build. In performing the operation of making a counter-opening, there is, I think, no instrument so convenient as a stout silver catheter—say a No. 10. I have used it in many cases, and prefer it to any form of probe. This case is also an illustration of another fact of great importance. In empyemata, which discharge themselves, whether through the lung or externally, there is, as a rule, no pneumothorax. There is, of course, a communication between the pleura and the outer air—that is to say, there is a channel by which air might enter, but as a rule it does not do so. There was in this case no air in the pleura until some was sucked in by the aspirator, when the chest was tapped some days before the incision was made and this quickly disappeared. In an ordinary case of pneumothorax air enters the pleura because the lung at once collapses; but when the lung is already collapsed, as it is in an empyema, and an opening either externally or into the lung is made, pus escapes until the positive pressure of the empyema is reduced to atmospheric pressure, and then ceases to flow; but in most cases air does not enter the pleura when the opening is small, the pus merely, as it were, runs over when the pleura becomes too full. This appears to have been exactly the condition of things in the present case. The case was not treated antiseptically except that a 1 per cent. carbolic acid solution was used to wash the pleura out with, and that the wounds were covered with oakum and carbolised cotton-wool.

STROUD HOSPITAL.

EPITHELIOMA OF PENIS; AMPUTATION, WITH TRANS-PLANTATION OF URETHRA THROUGH A HOLE IN THE PERINEUM.

(Under the care of Mr. STORRY.)

FOR the following notes we are indebted to Mr. Duncan R. Cameron, house-surgeon.

F. T—, a baker, aged fifty-two, was admitted into hospital on July 16th, 1883. He declared he had never had any chancre or clap. Nine months ago he noticed a small tumour about the size of a pea on the under part of the glans close to the frænum preputii. In a month's time the growth was as large as a hazel nut; and he began to suffer from the most painful priapisms. Up to four months ago he had been able always to uncover the glans penis.

The day following his admission Mr. Storry slit up the foreskin and removed a growth about the size of an ordinary hazel nut, together with a portion of the glans penis from the under side of the penis.

In a fortnight the patient was made an out-patient; but he presented himself in about six weeks' time with a return growth and with some considerable infiltration of the penis. His great complaint was his terrible suffering at night from painful erections. There were no enlarged glands in the groin. Mr. Storry, under ether, amputated the penis, after the method adopted by Prof. Thiersch, a short account of which is given in the May number of the *British Medical Journal* for 1878. The urethra was dissected out and transplanted through a hole in the perineum, and a drainage-tube was passed through the whole length of the scrotum. Within twenty-four hours the scrotum filled with blood, which caused the stitches to give way and, of course, delayed union. At the end of six weeks from the date of operation the patient was discharged with the wound almost healed, passing his urine easily and comfortably through the hole in the perineum, to the edges of which the urethra was attached. Three months after the operation he appeared at the hospital to show himself, having gained in flesh, and feeling "a new man," as he expressed himself, declaring he had no pain whatever, and could pass his urine with great ease and comfort, although he was obliged to take down his trousers altogether to micturate.

SHEFFIELD PUBLIC HOSPITAL.

FATAL CASE OF HYDROCHLORIC ACID POISONING; NECROPSY; REMARKS.

(Under the care of Dr. DYSON.)

FOR the following notes we are indebted to Dr. Sinclair White.

Henry S—, aged fifty-four years, recently discharged from a lunatic asylum, was brought to the hospital on Nov. 12th, 1883. He stated that he had swallowed two tablespoonfuls of strong "spirits of salts" three hours previously.

On admission he was considerably collapsed; the skin was cold and clammy; the countenance anxious; the pulse small, weak, and frequent. He had vomited several times; the vomited matter was dark in colour, viscid, contained blood, gave a strongly acid reaction with litmus, and a very copious white precipitate with a solution of nitrate of silver. On examining the mouth the mucous membrane was of a whitish colour, with here and there a red patch, showing where the epithelium had been removed. He complained of a burning sensation in the mouth, throat, and stomach; and pressure over the latter viscus caused pain. He did not complain of thirst, even when interrogated. There was no diarrhoea or tenesmus. Solution of potash, freely diluted, was administered, and afterwards lime-water and milk. Hot fomentations, sprinkled with laudanum, were applied over the stomach, and hot-water bottles to the feet. He passed a restless night, vomiting almost incessantly; got weaker next morning, and died collapsed seventeen hours after swallowing the acid.

An examination of the body was made thirty-two hours after death. The mucous membrane of the œsophagus was highly congested in its upper half; the lower half was black in colour, thickened and contracted; the veins stood out prominently, being filled with black blood. Just before its passage through the diaphragm there was a perforation in

the posterior wall of the size of a shilling, the tissues around the opening being black and pulpy, and infiltrated with grumous material. The mucous membrane of the stomach and the first five inches of the duodenum presented an appearance similar to that found in the lower half of the œsophagus. There was a perforation of the size of a florin in the stomach near its pyloric end, and a smaller one in the first inch of the duodenum. The contents of the stomach were found in the abdominal cavity, and the anterior edge of the liver was corroded by the acid. The peritoneal surface of the intestines was injected, and in some places covered with a thin layer of recent lymph. The action of the acid on the mucous membrane ceased about the middle of the duodenum; lower down the lining of the bowel was natural. The larynx and trachea were congested, the upper surface of the diaphragm was injected, and there was some commencing pneumonia in the base of the left lung.

Remarks by Dr. DYSON.—The above case is thought worth recording from the fact that poisoning by muriatic acid is comparatively rare in its occurrence. The spirit of salt used was that crude acid which is sold as such for commercial purposes, and contains, I believe, some arsenic as well as other impurities. The victim was in the habit of buying it to remove stains from his fingers. Perforation of the alimentary canal is rare, too, in this kind of poisoning; in this case it occurred in three places, one at the extreme lower end of the gullet, another in the stomach near the pylorus, and the third in the duodenum, about an inch from its upper end. No cough was present during the time that he was under observation; but post mortem there was well-marked injection of the mucous membrane of the larynx, trachea, and bronchi. The thin white covering seen in the mouth was identical with that described as characteristic of the action of this poison.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

The Treatment of Spinal Caries with Suppuration.

THE ordinary meeting of the above Society was held on Tuesday last, January 8th, Prof. J. Marshall, F.R.S., President, in the chair. A paper by Mr. Treves excited a long discussion, which occupied the whole evening. Specimens of spinal caries were exhibited by Mr. Treves, Mr. Berkeley Hill, and by Mr. Eve. Dr. Radcliffe Crocker showed three patients affected with scleroderma pigmentosa.

Mr. FREDERICK TREVES contributed a paper on the Direct Treatment of Spinal Caries by Operation, of which the following is an abstract:—The gravity of spinal caries depends not so much upon any special pathological feature in the process as upon the depth at which the disease is situated and its inaccessibility to the usual operative procedures applied to caries elsewhere. Diseased bone cannot be removed from the vertebral bodies, and the morbid products having to travel a great distance in order to be evacuated are apt to induce immense purulent collections. These collections are usually opened at a point remote from the original seat of the disease. In the operation proposed by the author the anterior surfaces of the bodies of all the lumbar vertebræ and—with some reservation—of the last dorsal vertebra, can be reached from the loin. A vertical incision is made near the outer edge of the erector spinæ; the sheath of that muscle and the quadratus lumborum are cut through; the psoas muscle is incised and the vertebræ reached by continuing the operation along the deep aspect of that structure. The details of the procedure were fully described in the paper. By means of this operation the vertebræ can be readily examined, carious or necrosed bone can be removed, a ready and direct exit can be given to all morbid products; an abscess situated in the psoas muscle or in the lumbar region can be evacuated whilst it is yet small and before it has led to a huge abscess cavity. If a large psoas or lumbar abscess exist it can be evacuated at its point of origin and at a spot that, in the recumbent posture, corresponds to its most dependent part. If Hueter's statement be true that the two vertebræ most frequently attacked by caries are the last dorsal and first lumbar, the operation should be capable of frequent application. The author details three cases in which he performed

this operation. All the patients made a good recovery. In one of the instances he evacuated at its point of origin a psoas abscess containing forty ounces of pus, and removed from the body of the first lumbar vertebra a large sequestrum measuring one inch by half an inch. The immediate improvement in this patient's condition was very marked. In another case, the psoas abscess had been opened in the thigh some months previously. By this operation a counter opening was made at the point of origin of the abscess from the lumbar spine, and the entire abscess cavity was drained by a tube passing from the origin of the psoas muscle to its insertion. Mr. Treves added that, with regard to the last case in the paper, the patient did well, but the boy had chronic lung disease, and the drainage-tube had to be removed, and he died with extensive cavities in the lungs and amyloid disease of the liver and kidneys. The boy's spine was exhibited. The girl, the first patient, was absolutely well.—Mr. BARWELL thought the condition of caries of the spine accessible to such an operation must always be occult to the surgeon. It was impossible to tell whether there was a single sequestrum to remove or extensive surface caries beyond the reach of the surgeon. But the operation was of use in opening the abscess at the most dependent position, and this would lead to decrease in fever and increase in strength. But Mr. Treves' cases would not show the operation to be very useful in ordinary cases of spinal caries. The first case was one of spinal necrosis, but this was not the usual condition in which the bone was found in cases of spinal caries. In strumous children the extent of caries was usually very great, and the most diseased part was often just in front of the vertebral canal, with extensive superficial disease above and below. He did not think the usual treatment of superficial caries applicable to spinal disease; but the treatment was still valuable as a mode of opening a psoas abscess and of giving access to the spine for examination.—Mr. BRYANT congratulated Mr. Treves on his application of general surgical principles to spinal disease. The operation was only likely to be successful for the removal of bone in a limited number of cases. Many psoas and lumbar abscesses originated quite independently of spinal caries, and led to superficial caries by spreading to the bone. Such abscesses should be opened early and drained efficiently. In many cases of spinal disease no operation could remove the source of the suppuration, for the disease was in the intervertebral substances and not in the bones. But free and early drainage favoured repair in such cases. He thought the tube used by Mr. Treves was larger than necessary. He himself had treated five or six cases of abscess about the spine by free drainage about the back of the crest of the ilium; in two cases he removed sequestra from the iliac crest; in three he failed to find diseased bone which he could remove.—Mr. KEETLEY had been long looking for a case suitable for treatment by erosion and iodoform; but he had as yet failed to find such a case, and he therefore did not think such cases common. In September last a young woman was under his care with a large lumbar abscess. This he opened antiseptically, finding three communicating cavities. There was no caries of the bodies of the spine, but of the transverse process of the second lumbar vertebra. This he scraped off, and then scraped the walls of the abscess and filled the cavity with a solution of iodoform in ether. Some time ago the girl left the hospital apparently quite well. His second case was one of disease of the lumbar spine in a young woman. An abscess had formed, and had left a sinus, which from time to time discharged pus very freely. He examined the spine through an incision. The bodies of the vertebræ were ankylosed and covered with fibrous tissue. There was, however, caries of the dorsum of the sacrum. This case he treated as the first, and the sinus closed well, but a similar sinus over the great trochanter, not treated with iodoform, did not close.—Mr. NOBLE SMITH remarked that Mr. Furneaux Jordan had some years ago introduced this treatment. He had recommended the operation to be done only for cases that resisted other modes of treatment, and steadily became worse and worse, and where there was evidently some local source of irritation. Mr. Smith protested against the employment of the operation in cases of early caries, which were so well dealt with by perfect rest. The general treatment of spinal caries failed from not employing perfect rest by mechanical means.—Mr. C. MACNAMARA alluded to Mr. Pott's treatise, in which the disease was first described. Pott said all the cases were relieved,