A CASE OF COMPLETE RUPTURE OF THE URETHRA, WITH EXTRAVASATION OF URINE.

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WILLIAM S., aged 42, baker, etc., in descending from his warehouse, fell off the ladder astride the iron handle of a truck standing vertically. Shortly after the accident, in trying to relieve the desire for micturition, he noticed a stream of blood coming from his meatus, followed with difficulty in the passage of urine. He lost about two ounces of blood.

October 5th, 1885. He at once sent for me, and on examination the perineum was found to be slightly swollen, excessively tender, with a small skin-abrasion in the centre. He was ordered a hip-bath, and sent to bed. A few hours later, with the assistance of my father, all our attempts to pass a catheter failed, a quantity of blood followed these attempts. Warm fomentations were applied to the perineum, which somewhat relieved the pain.

October 6th. Micturition was difficult and painful; the urine was preceded by a few drops of blood, and followed by a "peculiar creeping, smarting sensation," referred by the patient to the perineum. The swelling in the perineum had increased, and become harder. There was no oozing from the skin-abrasion. Temperature 100° Fahr. For the next three days, his temperature ranged between 100° Fahr. and 101° Fahr.

October 10th. Temperature 102° Fahr. The swelling or tumour in the perineum had much increased in the night, and fluctuation was detected. This was opened by free incision, when from one to two ounces of bloody urine with a little pus gushed out. The patient was asked to micturate, which he did in a free stream through the opening just made. He was much relieved by the incision and free micturition.

October 11th. Temperature 101°. In order to ascertain, if possible, the extent of the injury to the urethra, the wound in the perineum was stretched with a pair of blunt pointed dressing-forceps, when the divided vesical end of the urethra could be seen deep in the perineum. Hence our diagnosis of complete rupture of the membranous portion of the urethra. A No. 10 gum-elastic catheter (without stylet) was passed through the penis as far as the wound, and a second from the wound into the bladder. This was withdrawn, and the first one, after many attempts, was passed onwards into the bladder, guided throughout by one finger of the left hand in the perineal opening. This was tied in and left. The perineal opening was washed out every morning and dressed.

October 14th. Temperature 99° Fahr. The glans penis was painful, the foreskin oedematous; there was a discharge of thick yellow pus along the outside of the catheter. This increased until October 20th, when it was thought necessary to withdraw the catheter, which was found to be quite decayed, the portion within the bladder corroded.

An attempt to pass another catheter failed, and, as each attempt was followed by a good deal of bleeding, it was decided to leave it for a few days.

On micturating for the first time after the removal of the catheter, a very narrow stream of urine passed from the meatus, the main stream passing through the perineal opening.

For several days, micturition was accomplished partly through the penis and partly through the opening, till October 28th, when all the urine passed by the penis. Sometimes during the next few days there would be slight dribbling from the perineum during the act, till, on November 3rd, I managed to introduce into the bladder a No. 7 *bougie à coudé*, the resistance at the wound not being very great; this was followed by a No. 8 and No. 9 with difficulty; the latter was left in for three hours; on the following day for five hours. Bougies were passed each day until, on November 11th, a No. 11 was passed.

November 11th. The perineal opening was healed up completely. The patient was able to walk about, though not quite with his usual stride. A bougie was to be passed daily for some weeks.

REMARKS.—The withdrawal of the catheter was rendered necessary by the action of the decomposing urine, examination afterwards showing clearly the risk incurred in letting it remain longer. The speedy action of the urine was remarkable.

Had we succeeded in passing a second catheter after the withdrawal of the first, the result could not have been more satisfactory. It is remarkable that a blow severe enough to completely sever the urethra

should have produced nothing more externally than an abrasion of skin.

February 22nd, 1886. It is still necessary to pass a bougie once a week.

NOTE ON THE ASSOCIATION OF RHEUMATISM WITH SCARLATINA.

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In a group of cases of scarlatina, recently under observation, several points of interest were presented; and the appearance of irregular rheumatic affections especially deserves notice.

All the cases occurred under one roof. The house was in a thoroughly satisfactory sanitary condition. The disease began with a domestic servant, who, a few days previously to her attack, had been out with her lover and had been kissed by him. He was just convalescent after an attack of quinsy, which was well marked, and had ended by crisis. There was no other trace of infection. The prominent symptoms in her case were pain and stiffness in the muscles at the back of the neck. There was some tonsillitis, and an ill-marked rash was visible upon the chest only. Peeling of the cuticle followed, and she suffered an attack of erythema nodosum, after which she had subacute rheumatism of the hands and knees. There was no albuminuria.

Three little boys contracted the disease from her. Of two of these cases, it is enough to say that one was mild and the other sharp. The third case, which occurred last, is worth a brief notice. The boy, aged 4 years, was discovered to have a faint rash on the abdomen; otherwise, he seemed in good health. His temperature was subnormal; no affection of the throat could be detected; his appetite and spirits were unaffected. In two or three days the temperature arose to 100°, and the rash became vesicular. Some clear fluid could be drawn off with a needle, but, unfortunately, there was no one in the house to whom inoculation could be recommended.

During the progress of these cases of scarlatina, symptoms of rheumatism appeared among three adult members of the household. Colonel E. was taken ill with feverish symptoms. He had severe pain in the muscles at the back of the neck. The throat was injected. The temperature rose to 103°, but quickly subsided. This was followed by subacute rheumatism of the fibrous structures of the knee-joints, and by sciatica on both sides. He was physically depressed, and suffered from an indolent boil on the hand. There was at no time any rash, or albuminuria. The urine was pale and copious.

E., an adult female, who was nursing one of the boys, complained of severe pain and stiffness in the muscles behind the neck. The throat was red, and she was feverish. No rash appeared. The urine was pale and copious, and non-albuminous.

B., an adult female, was taken ill with feverish disturbance. The neck was stiff and very painful, and subsequently she suffered pain about the sacrum. Her throat was somewhat injected, but she had no rash. Here, again, the urine was free from albumen.

I have never before witnessed symptoms like these in connection with scarlatina. In discussing the subject with a medical friend a short time ago, he at once remembered that some time previously, whilst in close attendance upon scarlatina, he suffered a feverish attack, accompanied by severe pain in the cervical muscles.

THE DISINFECTION OF PHTHISICAL SPUTUM.

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THE tubercle-bacillus, on account of the relatively high temperature (86° to 106° Fahr.) required for its growth, can only live and multiply in animal bodies, at any rate, in temperate climates. But, though the bacilli are thus prevented from multiplying naturally outside an animal body, and soon die, it is not so with their spores, of which each bacillus, when in the spore-bearing condition, contains from one to three or four. The spores are very much more tenacious of life, and will bear great extremes of heat and cold. They are, however, with certainty killed by exposure for fifteen minutes to a moist heat of 212° Fahr.; this can be obtained either by steam or by plunging into boiling water. Dry heat is not so certain in its action, and requires a much longer exposure, about two hours to a temperature of 250° Fahr. The duration of the vitality of the spores at the ordinary temperature, in a climate such as this, reaches, at any rate, three or four months, and occasionally longer. This has been shown by Koch