

The quantity of medicine contained in the native prescription is evidently too strong for weak persons, as Smith was a remarkably stout man.

Calcutta, 14th Feb. 1805.

VIII.

Case of Stricture of the Urethra, followed by extensive Gangrene of the Scrotum and Perinaeum. By Mr C. ANDERSON, Fellow of the Royal College of Surgeons, Edinburgh.

8. Feb. 1806.—LUKE WEST, a pilot, 52 years of age, about seven days ago, complained of cold fits with rigour, succeeded by heat, though without any perspiration; irregular as to their appearance; and which generally attacked him twice in 24 hours. He took bark, which, in a few days, put a stop to these symptoms.

Soon after this left him, he observed a slight swelling of the prepuce, and imagining it to arise from a recent venereal infection, he applied to Mr P., who gave him mercurial medicines, in the use of which he has persisted for three days.

For several years he has laboured under a difficulty of passing urine, arising from strictures in the urethra, the effect of old venereal complaints; for these he had frequently used bougies, and a variety of other medicines, which only alleviated his complaints; the urine always flowing in a diminished stream, and at times attended with considerable pain, which was much aggravated about the time the shivering fits commenced; he this morning complained, for the first time, of an unusual enlargement of the scrotum, which, in the evening, was much distended, and very red; he had made little water all day, and that with much pain; the swelling occupied both sides of the scrotum, which was very hard and tense, and extended up to the root of the penis; there was also some little redness of the perinaeum.

Several long scarifications were made in the scrotum, from which there distilled a great quantity of urine, tinged with the blood from the incisions. In a short time the size of the swelling was diminished, and the scrotum pitted on pressure, which was not the case before; the whole cellular substance being so completely injected with urine, that it could not be made to pass from the cells into others. The mercurial medicines were discontinued; he got bark and a dose of opium at bed-time.

9. Has passed a tolerably quiet night; the swelling of the scrotum is much diminished; the redness continues much the same; there is a considerable portion, at the inferior part of the right side of the scrotum, (which was most swelled) in a gangrenous state. The redness extends to the perinæum, which is much swelled; and near the tuberosity of the right ischium is pointing, though in a gangrenous state.

As all the bad symptoms proceeded from the urine getting into the cellular substance, I was anxious to pass a small catheter to prevent any further injection of it. A small sized one could only be passed down to about the bulbous part of the urethra, which gave considerable pain; and, on being withdrawn, a few drops of blood followed. The abscess in the perinæum was freely opened; the finger introduced discovered all the parts about the neck of the bladder; the prostate gland was enlarged and hard; but being anxious to introduce the catheter, another attempt was made, with more success; the instrument could be felt all along the canal of the urethra through its substance, and at no part bare, which gave hopes that the opening in the urethra might be very minute, and afforded a prospect of healing. Dr Kellie, to whose friendly assistance I am much indebted, kept his finger on the point of the catheter; and, after some time, it got into the bladder, by his lifting up the point of the instrument, and there was immediately discharged a considerable quantity of urine, of a very high colour; the catheter was allowed to remain in, and he got gr. 1 of opium; some more scarifications were made in the scrotum, those made last night having nearly healed.

In the evening I found, to my great mortification, that he had withdrawn the catheter, probably in consequence of its irritation, and a frequent desire to make water, though he strenuously asserts, that it slipt out whilst he was asleep; the scarifications discharge well.

10. Had a good night; passed water very freely by urethra, and says none came by the wound; the redness and swelling of the scrotum are rather diminished; the gangrenous spot is well defined, and has not increased; pulse about 100, rather small, and intermits every third stroke, very regularly, which it has done for two days; tongue moist, but a little furred; no head-ach; little thirst; belly regular; continues the bark and wine.

11. Swelling of the scrotum is much diminished; the slough begins to separate at some parts; scarifications were made into it; the wound in the perinæum discharges very fetid matter, and the bottom of it is sloughy; edges look red and healthy; tongue and belly as yesterday; pulse firmer, though it still intermits.

12. The slough was carefully removed by dissection; testicle bare; edges of sore look healthy; a small opening in the upper part of the scrotum communicated with the larger; the bridge was divided; pulse rather firmer, though intermitting; tongue moist; the sore in perinæo is sloughy at the bottom; in passing urine, a small quantity comes by the wound; takes an ounce of pulv. cinchon. in 24 hours; body rather loose; two stools; to take less bark; opium at bed-time.

13. Sore of scrotum looks much cleaner, and begins to discharge good pus; that in perinæum is still black and sloughing; says that more urine comes by the wound when he makes water; pulse fuller, and regular; ate some beef-steak yesterday without any inconvenience, and had a tolerable night; tongue moist; belly regular; takes his bark regularly.

14. Sore looks healthy about edges; sloughy at the bottom; most of urine comes by the wound; pulse small, 80; tongue a little furred; belly regular.

15. Much as yesterday; continues bark and wine.

16. Has had a restless night; pulse very small and feeble, but regular; all the urine now comes by the wound; two motions; rather loose; took one grain of opium in morning; two grains at bed-time; has taken a bottle of wine in 24 hours; continues bark. The sore on scrotum looks more healthy, the cellular substance of it is completely destroyed; and this wound communicates with that of the perinæum; the two wounds were made into one, by dividing a bridge of integuments.

17. Has passed a quieter night, though he did not sleep much; pulse 84, still irregular, though not so feeble; all the gangrened cellular substance, except a very little at the upper part of the perinæum, is now removed; the bottom of the wound looks sound and healthy, and red granulations begin to spring from all parts of it; urine observed to flow from three different points; one stool since yesterday; tongue moist, but a very little foul; to continue opium, bark, and wine; of the first he takes one grain in forenoon, and two at bed-time; a little beef-steak for dinner, and a draught of porter.

19. Sore looks clean and healthy; discharges pus of a good appearance; at the superior part of the perinæum, as well as at the inferior, it is still a little sloughy; passes urine all by the wound, without any difficulty, or even smarting; wound granulates; that of scrotum very florid; pulse 84, intermits at times; belly rather costive omitted the opium; continues bark; to take ℞ ij. of p. jal. comp. in the afternoon; thinks a little urine came by urethra; tongue moist.

20. Tolerable night; laxative gave one motion, though costive; pulse 80, of tolerable strength; a flexible metallic bougie, perforated and bent into the form of catheter, was this morning introduced into the bladder without any great difficulty; at times it met with some obstruction, but, on resting for a second or two, it easily was made to advance; occasioned a slight spasmodic affection of urethra, in consequence of mechanical irritation of the catheter; about six ounces of urine were evacuated; the instrument was allowed to remain, to prevent the urine flowing through the erosion of the urethra, which, by passing over new granulations, would render them callous, and thereby prevent the healing of the wound, and form troublesome fistulæ. To allay the irritation, he got one grain of opium; to take less wine, and drink porter; the bottom of wound is of a florid red colour; in it the following parts are easily traced, bulbous part of urethra, covered with the accelerator urinæ muscle of right side; the urethra, running between it and muscle of the other side, could be felt distinctly with the point of the finger, distended with the catheter; the transversalis perinæi, also of the right side.

21. Has had a quiet night, and suffered no inconvenience from the catheter; pain subsided soon after taking the opium; has passed urine frequently through the instrument, and none comes by the wound; pulse and tongue much as usual, for these some days; belly bound; the laxative powder was repeated this morning, which gave a motion towards mid-day; takes beef-steak with porter, for dinner.

22. Has passed a quiet night, though with but little sleep; wound looks well; no inconvenience from the catheter, through which he makes water easily, and whenever the desire of evacuating the bladder comes on; pulse still feeble and irregular, beating 84 times in a minute, with an intermission at the end of every third pulsation; tongue moist, still a little foul; no head-ach; appetite good; to omit the opium in the evening, as he complains of being costive.

24. Every thing goes on well; ulcer quite clean, and discharge good; feels no inconvenience in wearing the catheter, except from the length, which projects a good deal beyond extremity of penis; passes his urine without any pain; none comes by wound; in expelling the last drops, however, he feels a desire as if to void more; as this arises from the irritation of instrument on cervix vesicæ, he was directed to desist from pressing; whilst the urine still flows in a stream, to cork the catheter, and turn on his back; by this, the small quantity of urine which remains will prevent the collapse of the bladder on the instrument, by distending the lower part of it.

25. This he has now practised for two days, and finds the uneasiness produced in expelling the last drops of urine, together with the great desire to continue expelling it, to have diminished very much.

March 3. The wound in the perinæum has filled up very much, though, at the lower part, it is still very deep : but all of it looks clean and very healthy. The sore in the scrotum is now level with skin, and begins to cicatrize ; pulse 80, and full, though at times irregular ; tongue clean and moist ; belly natural ; appetite good ; and sleeps well ; though, till last night, he has generally taken a dose of opium, having found, by experience, that it was requisite.—Last night, however, he slept well without any ; has sat up a little, though he is so much reduced, that, if he continues long in the erect posture, he feels faint, and becomes so fatigued, that he is obliged to lie down in bed. Upon the whole, the cure goes on as well as could be expected, considering him to be a man of an emaciated habit, and debilitated constitution. The wound looks very healthy ; and that part of it which is incarnated looks sound and firm, and discharges very little matter ; the sore, however, is dressed morning and evening. He continues to take a dose of Peruvian bark, four times a-day ; to drink half a bottle of wine, and a bottle of porter, every day ; and makes a good dinner of beef-steak, or roasted meat, &c.

6. Every thing continues to wear a favourable aspect. The catheter was withdrawn this morning, having been worn exactly fourteen days ; pulse, tongue, and belly, are much as formerly.

7. Continues well ; has made water four times since yesterday morning, which flows easily through the urethra, in a larger stream than for seven years past, without pain or difficulty, and none comes away by the wound ; he passed a better night than since he was ill, which he ascribes to the catheter having been removed, although he experienced no great uneasiness from it during the time it remained in the bladder.

10. The urine continues to be passed freely through the urethra ; the wound to look healthy and to cicatrize. When the urine has cooled, and remained some time in the vessel, there is a slight deposition of glairy matter. He was put upon the use of uva ursi, of which he is to take 3 ss. three times a-day.

20. Every thing continues to go on well. The sediment in the urine is rather less in quantity since taking the uva ursi ; continue.

April 5. Sore nearly healed up, except at the lower part of the perinæum ; urine is passed without any pain or difficulty. The quantity of sediment in the urine is nearly the same as it has

has been for some time; is able to walk about his room; and gains strength daily.

20. The sore is nearly all cicatrized; one small part in the centre, and another at the lower part is still a little tender; urine passed easily; the sediment has been nearly the same in quantity for some weeks; has taken the uva ursi regularly; but as there is no change, it is discontinued.

May 3. As the quantity of sediment in his urine has increased since leaving off the uva ursi, he has begun it again; for a few days, he took ℞ ij. for a dose, but this day ʒ j.

10. Continues to take uva ursi, and the sediment in his urine is in less quantity; he now walks about; discharges his urine freely, without any harm or difficulty, and considers himself in perfect health.

LEITH, 1806.

IX.

On the Application of Galvanism in the Cure of Diseases. By ANTHONY MONGIARDINI, M. D. Member of the Italian National Institute *.

BEFORE speaking of Galvanism, and of the reasons which induced me to make some experiments with the Pile of Volta, I do not think it superfluous to premise some observations on medical electricity, and to relate some experiments made with an excellent machine of Nairn. In this manner, I shall be better able to compare the effects of electricity with those of galvanism, and to discover if the fluid which circulates in both machines be the same.

Seven patients were treated with electricity. The first a priest, suffered under chronic ophthalmia, and a very copious involuntary discharge of tears, occasioned, not so much by any stricture on the lachrymal duct, as by the quantity of fluid spread over the *albuginea and tarsi*. Two complained of obstinate deafness; one a lady, 40 years of age, and the other, a young man of twenty-five. The fourth was a friar, paralytic, in the right leg and thigh, from a stroke of apoplexy. The fifth, a chlorotic girl,

* See *Memorie della Societa Medica, di Emulazione, di Genova.* Tomo II. 8vo. Genova 1805.