except behind the left scapula. Tonic medicines and treatment as before. Ordered the mixture of opium and tartar emetic, with double the quantity of the former (eight drachms of tincture), to be recommenced in the evening.

7th.—Slept soundly through the night after the first dose (an ounce) of the mixture, having been previously quiet in the daytime. This morning his condition in every respect much improved. Delirium quite gone. Pulse 76, of good volume. Expectoration fairly copious, free from discoloration. In fact, the crisis in the case was now over. The patient slept quite well on the next night without a sedative, and convalescence rapidly followed.

This was a case of pneumonia of low type, associated with pleurisy of the left lung—of course, a complication which added much to the danger. The liquid, sanguineous sputa—a valuable indication both as to the character of disease and treatment requisite—led to the employment of stimulation from the outset. This answered well, but although the lungs rapidly recovered their function, the patient would have succumbed to insomnia when, as regards the pneumonia, actually all but convalescent, were it not for sedatives. In this case I thought a single full dose of opium alone would suffice. I was in error, however. It may be said that bromide of potassium would have been equally efficacious—answered the purpose as well. Experience has led me to a different conclusion, and that the lengthened sound repose needed in cases of great exhaustion calls for a less depressant class of sedative. It is in the stimulant preparations of opium, enhanced in such action by the addition of small doses of antimony, that I place confidence. The precise therapeutic action of the two drugs when in combination I apprehend has yet to be arrived at. Graves does not, in his memoir on fever, profess to explain it.

The great value of antimony and opium in typhus I was afforded the opportunity of testing during a violent outbreak of the malady in the spring following the disastrous first winter in the Crimea.² I need scarcely add that terrible privation previously, as in the same visitations in Ireland, was the factor. And in London subsequently I have seen cases such as Graves describes, where the patient was all but *in articulo mortis*, with subsultus, a dicrotic pulse—scarcely countable from its frequency, and every precursor of a fatal issue, brought by such treatment speedily to a state of safety.

In some forms of delirium tremens, too, I can confirm Dr. Graves' experience of its efficacy. The views of the late Dr. Stokes, that typhus and typhoid are but modifications—developments—of the same poison, have been much controverted, and are antagonistic to those of physicians generally of the present day—certainly in England. From personal observation at the Dublin Fever Hospitals when quartered in that city, I can recall features of disease which to my mind entitle the observations of that eminently sagacious physician to at least very attentive consideration. As is tolerably well known, "fever," speaking in a broad, generic sense, obtains there always, and to an extent unknown in England.³ In the wards patients are met with of all ages, old and young, thus proving at least the fallacy of age as a reliable guide to diagnosis of one fever rather than the other. And there are in operation at Dublin—have been for an indefinite period—precisely the insanitary conditions from which enteric disease takes its origin. On the other hand, nothing has been more marked than the improved condition, as regards food and clothing, of the lowest classes—their material prosperity. The same elements for causation of enteric are to be found in most, if not all, of the large cities in Ireland, such as Cork (in a marked degree), Limerick, Clonmel, &c.

In conclusion, I would refer to the valuable paper recently contributed by Sir William Jenner on the treatment of enteric disease. My own experience, doubtless very small in comparison, has not hitherto shown me any ill consequences from the administration, carefully, of opium either in small or tolerably full doses; and I am disposed to look on its administration, particularly when there is reason to believe that ulceration of the intestine exists, as of much importance in helping Nature to a favourable issue.

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ON THE TREATMENT OF GLEET AND THE PREVENTION OF STRICTURE BY IRRIGATION OF THE URETHRA.

BY REGINALD HARRISON, F.R.C.S.,
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THERE are very few practitioners who have not at times experienced the greatest difficulty in the cure of gleet, in arresting the small quantity of urethral discharge which persistently, and in spite of all treatment, local and general, remains after the acuteness of a gonorrhoea has abated. Many patients have in despair given up the attempt to obtain a cure, and so have incurred the risk of a stricture as a consequence.

And yet what is all this trouble about? Simply a slight purulent discharge from a chronically inflamed patch in the urethra, which, by reason of its position, presents difficulties in its treatment. A state of affairs which, if it occurred in one of the more accessible spaces in the body, such as the mouth, nose, or larynx, where remedies can be directly and unerringly applied, there would not be the least difficulty in curing.

For the treatment of gleet a great variety of means and appliances have been suggested, including internal remedies by what are called anti-blennorrhagics, which are chiefly remarkable for their very nauseous taste; astringents of all kinds and degrees, applied locally as injections, or in the form of urethral pessaries; potent injections of caustics, which are only to be used by the practitioner himself with a suitable instrument; urethral brushes for the sweeping of the canal with a variety of solutions; insufflators for throwing in powders; contrivances for the application of ointments to the deeper portion of the urethra, *portes caustique*, and the urethral speculum, or, as it is called, the endoscope,—have all in their turn been brought into play for the purpose of what?—drying up somewhere about two minims per diem of muco-purulent discharge, which, were it not offensive to the sight, would probably be overlooked. Text-books have been in the habit of telling us for some time past that a persistent gleet is a sure forerunner of organic stricture; in fact, that a gleet may be regarded as indicating that a stricture is forming. By a train of reasoning, certainly not of proof, which I am at a loss to understand, the relative positions of gleet and stricture, as parts of a continued inflammatory process, have suddenly become altered. We are now told that pathologically we have been putting the cart before the horse, and that, as a matter of fact, from henceforward we are to understand that a gleet is an intimation to us, not that a stricture *will* form, but that it *has* already done so.

If we admit the truth of this at once, and set aside our old-fashioned dogma about gleet being the inflammatory process that precedes the formation of a stricture, and so agree to alter the relative position of the two, we shall then be prepared to adopt the view that a gleet can only be effectually cured by removing the stricture of which it is merely a symptom. And this latter we are asked to do by the employment of a dilating urethrotome and dilators, the use of which, judging from their size, would at once be misunderstood if they were described as being adapted for the treatment of stricture. Hence they are spoken of as instruments to be used in cases of gleet for the purpose of bringing urethras up to their "individuality," as if there were grounds for believing that in respect to form there was any more "individuality" about a man's urethra than there was about his rectum. I must say that I viewed with positive horror the idea of performing an internal urethrotomy on a man for a gleet on some presumptive evidence that his urethra lacked "individuality." I do not admit the soundness of the reasoning altering the relationship of gleet to stricture, or the practice which it is proposed to base upon it. In several instances which have come under my notice, the performance of internal urethrotomy, as recommended by Dr. Otis, has entirely failed to remove the disease—namely, the gleet for which it was undertaken.¹ True, the "individuality" of the urethra was restored, but "*la goutte militaire*" remained—

¹ On Stricture of the Urethra, by F. N. Otis, M.D., New York.

² For this suggestion I was indebted to my friend, Deputy Inspector-General Crosse, then of the 11th Hussars.

³ Among valued friends, leading physicians in Dublin, I can scarcely reckon one who had not passed through the ordeal of what I may safely call "Irish fever."

a compromise which the patient, at all events, failed to appreciate. Nor is Dr. Otis's operation free from dangerous as well as disappointing consequences, as I have shown by a published record of Mr. Berkeley Hill's cases referred to elsewhere.² If we consider certain conclusions which the examination of gleet and stricture cases, in considerable numbers, enables us to arrive at, I do not think we shall have difficulty in explaining our want of success, or in improving our treatment without resorting to an operation which I have already referred to as being, in my belief, both hazardous and disappointing.

The conclusions I would lay stress upon are these:—
1. That the large majority of strictures, excepting those caused by injuries to the urethra, are preceded by more or less chronic gonorrhœa or gleet. 2. That the most frequent seat of stricture corresponds with that of gleet—namely, the subpubic or deeper portion of the urethra.

Assuming these conclusions to be true, which I do, not only from my own personal observation but from that of others who have had sufficient opportunities of forming an opinion, it certainly looks as if the persistence of gleet and the formation of stricture were due to the imperfect means hitherto adopted for dealing with the bulbous and membranous portions of the urethra when chronically inflamed; in fact, that the disease escaped treatment altogether. Surely this is more rational than to regard the affection as an incurable one, or to propose to reverse the sequence of pathological events. Why do not women suffer from gleet or from stricture, or do so in such small proportion as not to alter the rule? Simply for the reason that the parts involved are easily to be got at for the purposes of treatment. The endoscope, moreover, has shown that the deeper portion of the urethra is the part affected in gleet, the appearance presented being granular and similar to what is observed in some forms of ophthalmia. Mr. Gould has also clearly demonstrated that this part of the canal, by reason of its position, is favourable to the retention of diseased secretions and other sources of irritation which would be likely to keep up the gleet discharge.³

All these observations seem to point to a conclusion that our means for efficiently applying remedies to the sub-pubic urethra are more or less imperfect, and that if we could deal with this part as directly as we do with the anterior third of the canal, the treatment of its disorders would be as successful as that of the other accessible cavities and passages of the body.

If I am correct in my assumption that the urethra at, and posterior to, the bulb (excluding of course the prostate) is the seat of the chronic inflammation we call "gleet," how utterly inert our treatment of it must be by injections as usually and popularly practised.

In the first place, I question whether an injection as used with an ordinary glass syringe ever succeeds in reaching the bulbous or membranous portions of the urethra, and even if it does so, as it may in a few instances when practised by old hands, its contact with the membrane is so brief as to be really useless. The conventional mode of injecting, so far as the deeper portion of the urethra is concerned, is just about as efficacious as a gargle would be if the patient slyly took a mouthful of the fluid prescribed, retained it for something like a minute, and then spat it out, repeating this performance twice or thrice a day. What possible service would this render to an ulcerated throat? If to make up for the briefness of contact between the injected fluid and the diseased surface the former is materially increased in strength, its very astringency, by provoking spasm, renders it intolerable and consequently useless. Do not injections, I ask, so applied prove to be in gleet utterly useless, whatever astringent is selected for the purpose? And, failing injections, or perhaps using them for supposed cleansing purposes, and as forlorn hopes, what else have we to fall back upon? Copiba, cubebs, and sandal wood, separate or combined, in every variety of form and shape, all more or less nauseous and disgusting. It is astonishing what power of endurance a man will submit his palate and stomach to to get rid of any trouble of this nature. Some of these anti-blennorrhagics, as they are called, prove successful in a certain proportion of cases in medicating the urine (often very obviously so), and thus cure the disease. But what is to be done with the number of persons, not inconsiderable, who are positively made ill by these remedies, and who are also not benefited by injections? These, as a rule, go on trusting to

the chapter of accidents, even if coming in the form of a newspaper advertisement, and generally reappear on the scene again after the urethra has been sufficiently indurated, by persisting inflammation, to be treated for a stricture. For by this time, the membrane, being hardened and structurally incapacitated from doing so, has ceased to secrete muco-purulent matter, and an organised stricture is thus substituted. Such is, I believe, the usual sequence of events.

For some time past I have been employing in the treatment of gleet a very thorough irrigation of the urethra throughout its whole length by means of an apparatus which I have had specially constructed for the purpose. So

far the results obtained have been highly satisfactory in speedily curing the gleet and consequently preventing the formation of stricture. In carrying out my views I have taken a hint from what is now done with so much benefit in the case of the nasal passages, a thorough irrigation or washing out of these by a suitable contrivance being substituted for the imperfect medication by syringes, brushes, snuffs, and such-like expedients, which were formerly prescribed with so little advantage. Many of the diseases of the nasal spaces which heretofore were considered most intractable are by the improvements in mechanical contrivances referred to rendered perfectly amenable to treatment. To effect this with the urethra I make use of a small Higginson's syringe and a sufficiently resisting vulcanised india-rubber catheter. I direct the patient twice or thrice a day to douche most thoroughly his urethra by means of these appliances, entirely discarding for the purpose all his notions about the old glass syringe arrangement as being utterly unfitted to cure a gleet. If the patient does not from the first recognise the necessity of submitting his urethra to a complete medicinal washing, his efforts, like his previous ones, will probably be ineffectual.

I direct the patient to denude himself of his nether garments, and, seating himself in a chair with his pelvis inclined forwards to the edge, to introduce the soft catheter and gently pay it into the urethra, having previously anointed it with some vaseline. If the patient finds that he can introduce and retain more easily a stiffer catheter, he may substitute one of the French instruments in the same way, of the required length and size, taking care that the eye is within half an inch or thereabouts of the end. Having done this, he attaches the catheter to the small Higginson's syringe, which is connected with a tumblerful of the fluid to be used, tepid. I generally make use of the sulpho-carbolate of zinc, in the strength of about half a teaspoonful to a pint of water. The patient, steadying the catheter in his urethra with his left hand (not squeezing the meatus around it), slowly compresses the ball of the syringe with his right hand, the vessel containing the fluid to be

² THE LANCET, April 8th, 1876.

³ Ibid., December 8th, 1877

injected being placed by his right side, or attached, as it may be done by a bottle arrangement, to the feeding-pipe of the syringe. In this way the patient is directed to continue using the apparatus until the urethra has been completely washed out; the fluid, after it has circulated between the walls of the urethra and the catheter, escaping through the meatus, where it is received into some convenient receptacle.

I may perhaps have been unnecessarily explicit in referring to all these details; but these being thoroughly carried out, and in a manner very different from the furtive and speedy action which characterises the proceeding as effected with the glass syringe, is essential to success.

There are one or two points which remain to be noted. The catheter should be six inches in length, and be completely passed into the urethra, merely allowing room for the connexion with the syringe-pipe. The catheter should not be larger than a No. 6 (English gauge), so as to allow plenty of room between it and the walls of the urethra, in which the injected fluid can circulate. The eye in the catheter should not be too near the end, or too large, and its edge should be beveled so as not to scrape the urethra. For smoothness in introduction, Tiemann's (of New York) velvet-eyed india-rubber catheters are a great improvement on the English make, where the eye of the instrument is punched out without being beveled. Whilst injecting the fluid its escape may suddenly be stopped for a few seconds; the doing of this forces the fluid into the small lacunæ of the urethra, and so cleanses and medicates them. The quality of astringent in the fluid should not be too great: to cleanse and astringe without pain, or even smarting, is what is required. The operation should be repeated at least twice in the twenty-four hours. The appliances used are so simple, that they can be brought into action in the course of a patient's ordinary bathing arrangements without inconvenience. I mention sulpho-carbolate of zinc as being the most generally applicable and useful astringent for these cases. Sulphate of zinc, borax, acetate of lead, quinine, and carbolic acid, all have their uses, according to circumstances, in these cases.

I have been asked whether harm may not be done by these injections finding their way into the bladder. I do not believe they do so, provided the meatus of the urethra is not compressed for more than the few seconds necessary to distend the urethra and cleanse the lacunæ. When the meatus is not compressed, which is the ordinary position of things whilst the process is going on (provided the catheter is not larger than the size I have specified), the injected fluid far more easily finds its way out through the meatus than into the bladder. Besides, if it did go into the bladder, it would do no harm if the strength of the solution is kept within the bounds I have indicated. About six inches is the extent to which the catheter should be passed before the injecting is commenced. If I have any doubt as to whether in a particular case this is sufficiently accurate, I first make a careful examination of the urethra with an ordinary bougie. This will at once indicate by the sensation produced the point or points upon which it is necessary more especially to act. This may possibly require a lengthening or a shortening of the catheter; six inches is the length I generally find to be sufficient. In compressing the syringe the action should be slow and gradual; if it is jerked, the fluid will not escape in the even and regular manner that is required, or the catheter may be forced out.

In addition to its use in curing gleet and preventing stricture, I think the urethral irrigator will prove to be of considerable service in cases of spermatorrhœa, where, as a consequence of all kinds of debauches, the generative apparatus has lost the tone that is necessary to the due performance of its function. It is, however, in the treatment of gleet more especially that I wish to draw attention, not only to the value of the instrument, but to the still greater importance of adopting more thorough means for the efficient application of remedies to the deeper portion of the urethra.⁴

⁴ The urethral irrigator has been made for me by Messrs. Symes, Hardman-street, Liverpool.

ON MEDICAL CERTIFICATES OF INSANITY.

BY T. N. BRUSHFIELD, M.D.,
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(Continued from p. 713.)

ALTHOUGH not strictly within the objects of this paper, there is one matter so intimately connected with the subject that I cannot help referring to it, on account of its importance to medical men generally, especially as it may be the cause of their being unjustly blamed. On the reception of any patient the asylum medical officer is required by the statute (16 & 17 Vict., cap. 97, sec. 89) to send to the Commissioners in Lunacy within seven clear days a written certificate as to whether from his own personal examination he is of opinion the patient be insane or not; and it occasionally happens he has to certify that the patient has exhibited no symptoms of insanity during the time he has been under his care. As a necessary sequence, some of these cases are discharged, and the certifying medical practitioner may feel annoyed from the idea that doubts have been thrown upon the correctness of the symptoms he had detailed. I know of remarkably few cases where such doubts had been entertained by the asylum medical officer, and it should be distinctly understood he gives no opinion as to the patient being *not insane*—the evidence of the previous symptoms being undoubted,—but he simply records that during the asylum residence no symptoms of insanity have been observed, although diligently sought for. This eventuality may occur in very different classes of cases, as I will now endeavour to point out.

1. Those showing no symptoms of insanity when admitted, but who exhibited evident symptoms when examined by the certifier—a probable occurrence is some form of epileptic and of recurrent mania. The Commissioners in Lunacy exercise a very wise discretion in many of these cases by requiring the asylum medical officer to send an additional certificate of the mental state of the patient at the end of two or more weeks, and before the termination of this period I have on several occasions known the symptoms of insanity to return, and so authorise the detention of the patient. Again, it is not uncommon in some cases of dipsomania, or of insanity produced by ordinary intemperance. The following is a good instance:—*Facts personal*. Has various delusions; one is that "the nurse and other persons here are conspiring to rob and injure her." *Facts hearsay*. "Informed by the police that she was running about the street nearly naked, followed by a lot of boys, and tried to jump into an area." This patient was perfectly rational when brought to the asylum, and showed no trace of delusion. Her case was one of confirmed dipsomania. A shrewd clever woman, and possessing ample means of living, she felt impelled to give way to drinking habits from time to time, and which always brought her into trouble. Fines and imprisonment had not the slightest effect upon her. There was no doubt she was to all intents and purposes insane prior to her admission; there was equally no doubt of her being exactly the reverse of this during her asylum residence. On being discharged she went into another county, and soon got into difficulties again. Some patients who show mental symptoms when admitted become comparatively sane after the administration of a warm bath and a purgative, so much so that if the certifier saw them at that time he would be unable to testify to their insanity.

2. Patients transferred from another asylum, being convalescent at the time. A patient may be adjudicated to a parish in another county, but at the time of transfer to the proper county asylum may have so far improved as to be fairly convalescent, but the medical superintendent who has had the care of the case may be doubtful as to complete restoration, and therefore instead of getting the patient discharged as recovered, he allows the patient to be transferred. The medical superintendent of the asylum so receiving the case may be unable to detect any symptoms that he would be warranted to describe as those of insanity, and so under his direction the patient is discharged as having exhibited no symptoms. Cases of this kind have occurred within my own knowledge.

AT the twenty-eighth anniversary festival of the City Orthopædic Hospital, held last week, the result of the enthusiastic appeal by the Lord Mayor, who presided, was a list of subscriptions amounting to over £500.