auditory canal, and the gland enlarged as the consequence of the exposed lymphatics absorbing and carrying the morbid fluid of the ulcer down to the lymphatic glands. That I believe to be the true interpretation of glandular enlargements from the irritation, as it is termed, of a remote cause; the "irritation" is supposed to travel along the lymphatics to the anatomically associated glands. I believe this hypothesis of irritation is an erroneous idea, and that the true explanation is, the arrival at the gland of a morbid fluid conveyed to it by the lymphatics. I doubt the validity of the reasoning which endeavours to press upon us the conviction that mere irritation can be conveyed from a sore to a lymphatic gland; it must be that the absorbents carry a morbid fluid centripetally to the gland. Fortunately for us, these glands are highly conservative in their tendency, and they stop the progress of the morbid fluid in its onward course towards the circulation of the blood, where its damaging influence might be more diffused, and lead very frequently to the occurrence of the more serious general condition which we are in the habit of denominating pyæmia.

I thought I might be excused this digression, though I hardly think it requires an excuse since it has enabled me to bring before you this illustrative group of cases, which, as far as I know, have not received due attention or a right interpretation.

FIG. 16

This sketch represents the nervous supply to the skin at the anterior and outer part of the wrist-joint, derived from three different trunks. *a*, a portion of the radio-spiral nerve; *b*, a portion of musculo-cutaneous nerve; *c*, palmar branch of the median nerve.

Before quitting the nerves of the upper extremity, I may direct attention to this diagram, taken from Mr. Swan's book on the Nerves. It shows the fascia covering certain tendons just above the wrist-joint, and you observe upon the fascia three nerves arising from three different sources. In truth, the fascia in this portion of the forearm may be said to be the common property of the muscles supplied with nerves derived from the median, the musculo-cutaneous, and the radio-spiral nerves, which latter sends its branches over the tendons of the supinator radii longus, one of the muscles which this radio-spiral nerve supplies. This example is a good illustration of the law exemplified by the same nerve which supplies the muscle supplying the skin over the insertion of the muscle. Here are three different muscular associations—the median nerve, supplying the flexors in front; the musculo-cutaneous, supplying the fascia, which is part of the insertion of the biceps; and the radio-spiral nerve, coming down to the outer side of the arm over the long supinator on its way to the dorsal aspect of the thumb, which it supplies exclusively.

CASES ILLUSTRATING THE TREATMENT OF STRICTURE OF THE URETHRA BY SUDDEN AND FORCIBLE DILATATION.

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THE method of treating stricture of the urethra both rapidly and effectually by means of the dilator introduced by Mr. Holt, of the Westminster Hospital, does not appear to have attracted that attention in the profession which the exceedingly favourable results would justify. Having had the opportunity of watching the progress of a large number of cases under that gentleman's care, I have adopted his method with the best results, and have selected the four following cases as being good illustrations of the mode of treatment.

Whether a stricture can ever be said to be absolutely cured must remain an open question; but a method of treatment which so rapidly restores the urethra to its normal size, and allows of the patient's continuing in perfect health for many months afterwards, as in these cases, is certainly worthy of trial.

Cases 1 and 4 were strictures caused by repeated gonorrhœas, and were of the densest character, the latter being complicated by a *fistula in perineo*. Cases 2 and 3 were of a more intractable nature, being of traumatic origin, the tendency to re-contraction being one of the great characteristics of the affection. In Case 2, the perinæum had been perfectly riddled with fistulæ, which had converted it into an irregular, hardened mass, such as is seldom witnessed, which, however, rapidly disappeared upon the urethra being restored to its normal condition.

It will be noticed that in none of the cases was there any "urethral fever" after the operation, and in one only was there a rigor, which took place on the day after the operation, and was consequent upon the passage of an instrument, which might as well have been omitted for a day or two.

CASE 1.—Mr. E. P—, aged twenty-five, came under my care in January, 1860. Has lived a very fast life, and had gonorrhœa repeatedly. Four years since, after a long gleet, first suffered from retention, which was relieved by the use of a catheter; but he underwent no regular treatment for the stricture, and since that time he has suffered occasionally from retention, and the stream has been decreasing in size. Two years ago a surgeon passed No. 4 with great difficulty to relieve retention; but this gave him such pain that he has never had an instrument passed since. Has been living carefully for the last year, and his general health has been pretty good, although he is thin and pale. He suffers from frequent nocturnal erections and emissions; the stream of urine is very small and twisted, and is passed with great difficulty and straining.

The patient having the greatest dread of pain, on the 14th of January, 1860, chloroform having been administered, I proceeded to examine the urethra. Found a very dense cartilaginous stricture (which could be clearly felt from without), about two inches from the orifice, and through this with very considerable difficulty I introduced No. 00 silver catheter (i. e., two sizes smaller than the ordinary No. 1). Another stricture existed at the bulb, which gave some trouble; but this was at length overcome, and the catheter entered the bladder. Instrument tied in. Ordered half a drachm of tincture of opium.

Jan. 15th.—Tried to replace the No. 00 by No. 1, but failed (without chloroform), and therefore replaced No. 00. Has had no shivering nor inconvenience, except the presence of the catheter.

16th.—Introduced No. 1, and tied in.

17th.—Passed No. 2, and tied in.

18th.—No. 3 tied in. Lies on the sofa, and suffers little inconvenience.

19th.—No. 4.

21st.—Chloroform having been again administered, I passed Mr. Holt's dilator (small size) through both strictures into the bladder, and then introduced No. 4 tube. Having withdrawn this instrument, I was then enabled to pass the full-sized dilator while closed, and into it I at once introduced No. 10 tube, which required some considerable force, owing to the

density of the stricture. The dilator having been withdrawn, a No. 10 silver catheter passed readily enough; the bladder was evacuated, and the instrument withdrawn. To take half a drachm of tincture of opium.

22nd.—Passed a very good night; has a little smarting when the urine is voided. Passed No. 10.

23rd.—No. 10 passed readily.

25th.—Walked to my house, where I introduced No. 10.

Feb. 1st.—Has been prevented by business from coming for the last week, and has not used a catheter. I passed No. 10, which was a little tight.

5th.—Urine quite clear; feels better than he has done for the last three years; nocturnal emissions much diminished.

13th.—Has procured a No. 10 metal bougie, which he is to learn to pass for himself, and made his first attempt to-day. Nocturnal emissions have quite ceased, though he has occasional erections. I did not see the patient again, owing to his dread of having an instrument passed, until the middle of March, when he sent for me, and I found that he had contracted a gonorrhœa, and had orchitis. For this he had been treated by his brother, and the acute symptoms had gone off. I therefore strapped the testicle, and he was soon able to go into the country. Says that he passes a capital stream of urine without any difficulty, but will not let me pass an instrument. Up to the present time he has not required further treatment for the stricture.

For the opportunity of treating the following cases I am indebted to Henry Bullen, Esq., the surgeon to the Lambeth Infirmary. The patients having been more or less under this gentleman's observation up to the present time, it is satisfactory to find that their condition is exceedingly good, and that they have required no further treatment.

CASE 2.—Thomas J—, aged fifty-seven, was admitted into the Infirmary of the Lambeth Workhouse in November, 1859, under the care of Mr. Bullen. His complaint was stricture and perineal abscess, which arose from an accident at the London Gas Works nearly six years ago, when he fell astride an iron pipe. Originally under the care of Mr. Cock, of Guy's Hospital, he was discharged after the successful use of the catheter about twenty times, relieved, but not cured.

At the time of his admission into the Infirmary there were several sinuses opening in the perinæum, and one above the pubes, through all of which urine at times passed. The stream which came by the natural passage was exceedingly small and thread-like. With rest and medical treatment these sinuses have all healed, except one in the perinæum, through which from time to time urine still finds its way. The cicatrix is hard and knotty, and communicates to the fingers a sensation of cartilaginous density.

After some ineffectual attempts to introduce catheters of small size, he was by my advice placed under the influence of chloroform on the 23rd of February, 1860; and having passed a grooved director through the sinus into the bladder, I proceeded to force a No. 5 staff through the stricture and tough cicatrix as far as possible in the course of the urethra until it impinged upon the director, which served to guide it into the bladder. This was accomplished with considerable difficulty, and subsequently a No. 3 silver catheter was substituted for the staff, and was tied in.

During the succeeding night, owing to the patient's restlessness, the catheter slipped out. The dilatation of the stricture, which had been so far effected, proved, however, of the greatest service to him, as he was able to pass in consequence a pretty full stream of urine. Several ineffectual attempts were made to re-introduce an instrument, and therefore on the 17th of March I had him placed under chloroform, when I was enabled to introduce Mr. Holt's dilator with some difficulty. The stricture was successfully split up, a No. 10 catheter readily introduced, and the bladder evacuated, after which the instrument was withdrawn. A full dose of opium with hot brandy and water was administered immediately after the operation, under the influence of which he passed a good night.

March 18th.—A No. 9 catheter was used with comparative ease, it being found impracticable to introduce a larger size without force. In the afternoon he had a rigor, which was treated with the warm bath and hot brandy and water.

19th.—Patient progressing favourably, and passes a good stream; catheter not passed, owing to patient's being asleep.

21st.—No. 10 catheter was passed, and its use was continued occasionally for some weeks. The sinus in the perinæum entirely closed, the thickening along the urethra totally disappeared, and the patient was able to resume his work.

CASE 3.—John W—, aged sixty-one, admitted into the

Lambeth Workhouse Infirmary, under the care of Mr. Bullen, on the 8th of December, 1859, suffering from stricture caused by falling off a ladder astride a piece of timber at Exeter, about twenty four years ago. He was then under the care of Mr. James, of Exeter, three weeks, and was apparently quite well until 1842, when he was admitted into Guy's Hospital with stricture, and was under the care of Messrs. Cooper, Key, Cock, and Callaway, who were unable to introduce a catheter into the bladder. In 1847 he was admitted into University College Hospital, under the care of Mr. Quain and Mr. Liston, and a No. 5 catheter was introduced by the latter surgeon on one occasion only, every subsequent attempt being unsuccessful. In the early part of 1859 he was admitted into the hospital at Melbourne, Australia, under the care of Mr. Ellis, and was discharged as incurable.

After several ineffectual attempts to pass a small catheter, he was placed under chloroform, and I succeeded in passing No. 1 silver catheter, which was tied in; and on following days Nos. 2 and 3, which were also tied in. Subsequently the instrument was removed for a few days, and the urine passed in a small stream.

On the 17th of March, 1860, the patient was again put under chloroform, and Mr. Holt's dilator having been introduced, the stricture was split up and a No. 12 catheter introduced. This was followed up by the use of an instrument on alternate days for a few weeks, when the man was discharged cured, and remains so, having been under observation up to the present time, being actively employed in the workhouse at his trade as a carpenter.

CASE 4.—Henry L—, aged sixty, admitted into the Infirmary of Lambeth Workhouse, under Mr. Bullen's care, on the 10th April, 1860, suffering from stricture and perineal abscess, the supposed cause being repeated gonorrhœas twenty-five years ago. He was admitted into St. Thomas's Hospital, and was under the care of Mr. South seven weeks, six or seven years ago. Was admitted into the same hospital a second time in November, 1858, and was under the care of Mr. Macmurdo four months; but a catheter was never introduced into the bladder.

May 3rd, 1860.—He was placed under chloroform, and I introduced No. 4 silver catheter, after which Mr. Holt's dilator was employed, and the stricture having been split up, No. 10 catheter was readily introduced. The use of this catheter was continued for some time, when he was discharged cured, with the fistula healed, and up to the present time he has remained quite well.

Sackville-street, August, 1861.

ON THE EMPLOYMENT OF NITRIC ACID AND OPIUM FOR THE TREATMENT OF THE AUTUMNAL FORMS OF DIARRHŒA AND DYSENTERY.

BY PATRICK J. HYNES, M.D., Nottingham.

THE periodical recurrence of these well-known visitants is so certain as to become almost "as familiar as household words;" in fact, to such an extent is this the case, that medical men in extensive practice, enjoying, as it were, an interval of comparative repose during the early summer months, from the fatigue consequent upon their attention to the host of diseases of the pulmonary organs inevitable in the cold and dampness of our climate, buckle on their armour to combat, each in his own peculiar fashion, with an enemy which is, if we may judge from the present rate of mortality in the metropolis, (*vide* the Registrar General's "Return" of the 17th inst.) of an equally formidable character.

I am not going to write an elaborate article upon the above diseases, since the numerous treatises that abound describe the various stages and symptoms of these complaints; but my object is to bring more prominently forward a remedy, which, although it is by no means a new one, still, I think, is not generally employed; and I am bold enough to hope that its more extensive use in the hands of the medical gentlemen of the metropolis would have the effect of mitigating much of the present rate of mortality. About ten years since, diarrhœa and dysentery prevailed rather extensively in this locality, and