nervous supply of the eye, probably by direct degenerative action on the central nerve elements, and as a result the following may ensue: First, atrophic changes in the cornea producing a typical keratitis. Secondly, degenerative changes in the tissues of the optic nerve producing a true malarial neuro-retinitis. Thirdly, paresis of the extrinsic muscles of the eye. Fourthly, affections of the sensory nerves of supply.

This, I think, represents a fairly accurate and reasonable view of what really occurs. All the other many affections of the eye structures which have been described as being malarial are not truly so, but are probably simply inter-current affections or complications.

A practical conclusion is that in military operations in tropical countries in all cases of chronic eye trouble latent errors of refraction should be looked for. Their correction will in many cases cure or alleviate greatly the condition even though the error may be a small one.

AN OPERATION FOR RECONSTRUCTION OF THE URETHRA IN CASES OF SEVERE OR IMPERMEABLE STRICTURE.

BY

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THE following cases illustrate a method of procedure for reconstruction of the urethra in severe or impermeable stricture which will prove, in my opinion, more reliable and easier to perform than any other yet commonly practised.

A patient, aged 43, admitted to Christchurch Hospital in March, 1917, under my care had complete retention of urine, and the doctor who sent him had failed to pass any instrument. It was found that no instrument could be passed owing to a tough stricture in the bulbous portion of the urethra. The site of this stricture corresponded with a scar in the perineum, where an abscess had been opened some years previously. He stated that he had frequently to pass a catheter himself, that numerous doctors had dilated his strictures at intervals during the past eight years, and that the process had been more frequent and difficult of late. He had a high temperature and rapid pulse on admission, and looked pale and ill. Rigors also occurred.

Paracentesis suprapubically failed to relieve him except for a trickle. It was judged that the failure was due to the bladder being full of blood clot. Suprapubic cystotomy was performed without loss of time, and a very large quantity of foul-smelling blood clot and urine escaped. The bladder was washed out and drained. He recovered rapidly, and in a few weeks had put on flesh, but no instrument could be passed through the urethra. I decided to attempt some method of restoration of the urethra.

In Murphy's *Clinics* (December, 1916, vol. v, No. 6, p. 1189) Dr. Hochrein of Chicago described an original operation, performed for the first time in October, 1914, for the cure of an impassable stricture of the penile portion of the urethra by the use of a pedicled attached flap of dartos. I decided to adopt this method with necessary modifications.

Operation.

With the patient in the lithotomy position, a Wheelhouse's sound was passed as far as the stricture and an incision of ample length made in the middle line of the perineum down to and through the urethra on to the end of the instrument. With some difficulty a fine probe was passed through the stricture into the bladder. This was left in whilst the dense fibrous tissue was divided, laying open the "floor" or ventral wall of the urethra. I continued this incision until I was able easily to pass my finger into the bladder alongside the probe. I now dissected away all scar tissue, being careful only to preserve a strip of the "roof" of the urethra, representing, perhaps, one-third of the circumference. This appeared quite normal and was essential for the further steps of the operation. A broad flap of dartos was now cut in such a way as to leave the base attached in the vicinity of the point of the urethra which was first opened—that is, the most distal portion of the stricture. This flap would be $2\frac{1}{2}$ in. long and $1\frac{1}{2}$ in. broad, its rounded free end pointing towards the meatus. When dissected back, it reached easily to the limit of the dissection, which had been carried towards the bladder, as previously described. A rectal tube, the size of the middle finger, was now passed

through the meatus and brought out in the wound. This was re-entered and passed easily along the proximal urethra into the bladder. The flap was brought back over this, and, by slightly displacing the rubber tube, the left side of the flap was secured by numerous plain catgut interrupted stitches to the corresponding edge of the strip of urethral roof which had been left as described. This was repeated on the other side, and the end of the flap was finally stitched accurately to the divided circumferential edge of the proximal urethra. The gap in the dartos was closed with a few catgut stitches and the incision closed. The tube was secured to the retracted foreskin by a stitch behind the corona. It was my intention to leave the tube in for three weeks, but the patient sneezed it out at the end of a week. It was cleaned and sterilized, and I was somewhat surprised to find that it went in again with ease. Three weeks after the operation it was removed, and the patient has passed urine with perfect ease since (eleven months ago). I was able to pass a 14 to 17 Lister's bougie with ease six months after the operation. About seven months after the operation the patient had a typical attack of renal colic, and about a week later he informed me he had passed a round smooth brownish stone as large as a pea.

I have since performed similar operations in two other cases.

In the first of these I had the misfortune, in shaping the flap, to divide the superficial perineal artery on the right side. As a natural result the flap sloughed on that side. I managed to close the resulting fistula at a second operation, and when last heard of the wound was quite healed, and he was passing urine normally. In the second of these cases there was a perineal fistula just proximal to a stricture. The patient had for a considerable time been passing all his urine through the fistula, and his life was a misery to him. In this case I took the flap from the left side and turned it across. This seemed easier at the time, and involved much less time in stitching. The operation in this second case was performed under spinal anaesthesia, owing to the patient's age and debilitated condition. All the patients up to the time of writing are quite healed, and passing urine normally.

I have been induced to put these cases on record because I believe the flap operation is easier to perform and a great deal more satisfactory than the grafting operation. There is no doubt in my mind that the urethral epithelium rapidly grows from the strip left in the roof of the urethra, and covers the entire surface of the dartos flap.

THE INFLUENZA EPIDEMIC IN A CAMP.

BY

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THE widely prevalent influenza epidemic visited this camp recently, 1,439 cases being admitted to hospital between June 21st and July 10th. The admissions on the first day of this period numbered 27, and gradually increased to their maximum on July 1st, on which day 154 cases were admitted. Thereafter the number of admissions gradually decreased.

Most of the cases were of characteristic type—admitted with temperature ranging from 101° to 104° , complaining of headache, backache (lumbar), general aching, and sore throat. The majority stated that they had been suddenly taken ill, with a feeling of great weakness. They looked ill; but apart from the fever, some congestion of the pharynx, and in a few cases slight bronchial catarrh, presented no other symptoms.

The illness ran a short course, the average duration of stay in hospital being five days. Within twenty-four to forty-eight hours of admission the temperature dropped by crisis to normal, or hovered between 99° and 100° for a few days. During the period of elevation of temperature the patients slept most of the time, and did not care to be disturbed, even for food. As soon as the temperature dropped they sat up in bed looking and feeling well, and began taking their food well.

Complications were few. Several patients had obstinate constipation; one or two had mild diarrhoea. Cough in a few cases was troublesome. Sixteen of the 1,439 cases