It is therefore impossible to be quite sure of the species of *Entamoeba* concerned; but, considering the morphological characters noted, there seems to be no valid reason to doubt that it was other than the commonly occurring *Entamoeba tetragena*. Certainly the motility of the amoebae found in the urine was much greater than that of any *Entamoeba* that I have ever seen in the stools, but possibly the fluid nature of the medium may account for this.

To what extent the urinary tract was affected is also doubtful. In a case recorded by Posner,³ that author came to the conclusion that the *Entamoeba* spread from the bladder to the pelvis of the kidney.

The present case appears to be one of chronic tubal nephritis, and it seems to me to be more probable that the infection of the urinary tract with *Entamoeba* merely aggravated a pre-existing condition than that it was itself the actual cause of the disease. The disappearance of the *Entamoeba* from the urine, as the result of hypodermic injections of emetine, was immediately followed by the disappearance of blood from the urine, and a marked diminution (but not total disappearance) of anasarca, with, of course, a considerable diminution of the albumin in the urine. The tube-casts also diminished considerably in numbers. If the *Entamoeba* were confined to the bladder, it is difficult to understand the marked amelioration of the condition of the urine as regards tube-casts, and the diminution in severity of the general symptoms. Now, however, although more than a month has elapsed since any *Entamoeba* have been found, there is still some anasarca, and some albumin and a few tube-casts still persist in the urine. In Posner's case several relapses occurred in the course of more than a year; it will be interesting to note whether the present case also relapses.

The mode of access of the *Entamoeba* to the urinary tract appears to be fairly obvious in this case. Although the patient states that he has never suffered from dysentery, *Entamoeba* were found in his stools (otherwise normal) on two consecutive days, and their characters agreed with those of *Entamoeba tetragena*. It is the custom among Indians to wash the parts about the anus and perineum with water, after defaecation. It is easy to understand that *Entamoeba* could readily be transferred by the ablution water from the neighbourhood of the anus to the orifice of the urethra, whence they could make their way to the bladder and the rest of the urinary tract. Probably an abnormal condition of the urine is necessary for the parasites to establish themselves. Chronic nephritis is a common enough disease in India, and so also is intestinal amoebiasis; hence opportunities for the infection of the urinary tract must frequently be present, and the case recorded above suggests that possibly urinary amoebiasis is a commoner condition among Indians and other Asiatic races than is generally supposed.

The rapid disappearance of the *Entamoeba* from the urine of this case, as the result of hypodermic injections of emetine, is an interesting confirmation of the efficacy of this treatment in other forms of amoebiasis.

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¹ Braun, *Animal Parasites of Man*, 1906, pp. 37-8. ² Doflein, *Lehrbuch der Protozoen-Kunde*, 1909, pp. 505-6. ³ Braun, loc. cit.

CHRONIC INTESTINAL STASIS ASSOCIATED WITH LANE'S ILEAL KINK AND HYPOTHYROIDISM.

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IN face of the continued expression¹ of conflicting opinions on the real importance of peritoneal bands, whatever their mode of origin, in the production of chronic intestinal stasis, it may be of sufficient interest to place on record an instance illustrating beyond doubt the leading part that may be played by Lane's ileal band in simulating chronic appendicitis and in the causation of obstruction by kinking.

Mrs. B., European, aged 23, multipara (2), was admitted into the Countess of Dufferin Hospital, Baroda, on December 6th, 1914, for chronic intestinal stasis.

She had always been subject to constipation; for the last three years it had been getting worse, her bowels

opening regularly only once every seven or eight days. She first had pain in the right iliac fossa about five and a half years ago, so much so that about three and a half years ago her appendix was removed in London by a well-known surgeon, but the attacks of pain did not disappear; if anything they had been getting worse, especially at the premenstrual time. Evidence of peristalsis in the right iliac fossa had been observed during an attack of pain by Major Mackechnie, I.M.S., under whose treatment she had been. He desired to operate on her, and for that purpose facilities were given him at the hospital.

Mrs. B. had pigmentation of the skin and presented many symptoms associated with chronic intestinal stasis, and, on careful scrutiny, also with hypothyroidism; in which order these two conditions should be correlated is a matter for speculation beyond the scope of this report.² It is to be noted that there was no relaxation of the abdominal walls or external evidence of enteroptosis.

I assisted Major Mackechnie at the operation, which was performed on December 7th, 1914. It had been proposed to perform an ileo-sigmoidostomy. The parts on opening the abdomen presented a disappointingly normal appearance. The caecum showed no trace of its removed appendix. There was no distension, no matting or any trace of old inflammation, no hypertrophy, no obvious sign of constriction or narrowing of lumen of any part of the gut. It was only on closer examination that Lane's ileal kink was identified. The peritoneal band was clamped, divided, and ligated, completely freeing the gut from its downward pull. The proposed ileo-sigmoidostomy was abandoned, and the rest of the operation consisted in "slinging" the retroverted uterus.

Major Mackechnie left for the front the day after the operation, and the case has remained under my observation. It is now more than three months since the operation, which yielded immediate striking results in the correction of the stasis. The latest report from the patient is that her bowels still continue to move daily, copiously, and without the help of any laxative.

It is regrettable that we had not the means of observing the behaviour of the gut under radiographic examination. I do not know, however, what more conclusive evidence than in this case can be adduced in favour of Lane's ileal kink having been the sole cause of the chronic obstruction. There was no disturbing factor otherwise to account for the stasis or to which the ultimate success of the operation might have been attributed. The fact that the appendix had been previously removed without relief does away with the suggestion of an inflamed appendix causing spasm of the ileo-caecal valve.

For those who admit only of the possibility of Lane's band playing a secondary part consequent on inflammatory thickening or contraction, or on "marked" visceral ptosis, or on defective tone of the intestinal wall, it may be said with absolute certainty that none of these conditions existed.

Rightly or wrongly, as time will show, none of the more ambitious operative measures had been undertaken such as ileo-sigmoidostomy, with or without colectomy, partial or complete, to which the success of the operation might have been attributed without in any way establishing a case for Lane's ileal kink.

Correction of the position of the uterus has no doubt helped in the disappearance of the premenstrual pelvic pain, but considering that the appendages were perfectly normal I do not know that it is possible to ascribe the pain in the right iliac fossa to a "reflex tonic spasm of the psoas muscle," though the attacks of pain were said to have been worse premenstrually. At any rate it would be too far-fetched to connect the dramatic relief of such pronounced stasis with the correction of the retroversion of an otherwise perfectly normal and movable uterus.

It may be further recorded that while the patient has been feeling ever so much better than she had ever felt before, and that her complexion soon became clear and pink, and all pelvic and right iliac pains have disappeared, yet the premenstrual headaches and neuralgias, though far less severe, still persisted, and there had been no appreciable diminution in the menstrual flow, which had always been far too abundant. The uterus is freely movable and in perfect position; the eyes, nose, and mouth, etc., have

been rigorously excluded as peccant causes of the neuralgias. From other associated symptoms of hypothyroidism I recently determined to place the patient on thyroid medication, yielding within the short period unexpectedly gratifying results.

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A CASE OF LACRYMAL CONCRETIONS.

BY

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C. M., female, aged 68, came to the Eye Infirmary in November, 1914, complaining of pain and discharge in the left eye.

The history was as follows: For the last three or four years she had been troubled with "watering" in the left eye, the fluid remaining quite clear until the last two or three months, when it became purulent and was associated with a good deal of pain and smarting in the corner of the eye; recently this pain had been so severe as to disturb her sleep at night.

On first seeing the patient one thought that she had a "sty" at the inner end of the lower lid, as it was much thickened and inflamed in this situation, but on looking more closely it was seen that the punctum was standing out at the summit of the inflammatory mass, as shown by a bead of pus exuding from it; the caruncle and neighbouring part of the conjunctiva were much congested, and on everting the lower lid the region of the canaliculus was seen to be greatly enlarged and swollen towards the conjunctival surface. A probe was passed through the canaliculus without the presence of any concretion being detected. The region of the upper canaliculus showed changes precisely similar to those of the lower.

The lacrymal sac itself was not dilated, and on syringing through the lower canaliculus only a small quantity of muco-purulent fluid escaped through the upper; no fluid appeared to pass down the nasal duct.

The lower canaliculus was then slit up, and at once six small faceted fawn-coloured concretions escaped; they were not very hard, and could be indented with a probe. On slitting up the upper canaliculus three somewhat larger concretions escaped, also faceted, and of the same consistency and colour as the others. The largest concretion measured 4 mm. across and the smallest 2 mm. Both canaliculi were greatly dilated, and their mucous lining was replaced by granulation tissue; nevertheless, they were still patent into the lacrymal sac, as shown by the course of the fluid on syringing. When a probe was passed into the lacrymal sac through the partially slit-up canaliculi, it was evident that they were constricted just at their entrance into the sac.

The literature on this subject shows it to be a rare condition.¹ The upper canaliculus is said rarely to be affected, although it was so in this case. Accompanying dacryocystitis is unusual, and in this patient the epiphora of several years' duration can well be explained by the obstruction in the canaliculi rather than by any nasal duct obstruction; this is borne out by the subsequent course of events, as two months after the removal of the concretions the woman had no epiphora and no accumulation of fluid in the lacrymal sac; the canaliculi had remained patent, and all thickening and congestion around them had disappeared.

Bacteriological examination of the concretions after decalcification showed them to be made up of a mass of organisms somewhat resembling colonies of actinomyces—long, thin organisms of the streptothrix class, staining very imperfectly by Gram's or methylene blue stains, and showing in places false branching.

The bacteriology of this affection is as yet rather obscure and in want of accurate classification, but most observers agree that the concretions are due to a fungus which is a form of streptothrix² difficult of cultivation.

In conclusion, I desire to express my indebtedness to

Dr. G. P. C. Claridge for the bacteriological investigation of this case.

REFERENCES.

¹ Swanzy and Werner, *Diseases of the Eye*, tenth edition, p. 574.
² Pyle's *System of Ophthalmic Practice* (Pathology and Bacteriology).

EXCESSIVE REACTION FOLLOWING THE USE OF TINCTURE OF IODINE.

BY WILLIAM J. RUTHERFURD, M.D.

THE subject of severe reaction following the application of iodine as an antiseptic having been brought forward in the *JOURNAL* in an annotation on German war experiences,¹ it may be timely to place on record a few British observations on the same subject. I have been able to find only three such cases in my private journals in the notes of over 14,000 cases of illness, so that they are certainly not of very common occurrence; however, this excessive iodine reaction, like petrol dermatitis and other forms of *dermatitis a medicamentis*, seems greatly to depend on the personal tissue-reactions of the patient, or, in other words, on idiosyncrasy. To what extent this idiosyncrasy towards iodine may be developed or augmented by the hardships of trench warfare in the cold season it is difficult to say; but that external influences, nerve strain, and want of rest may have such a modifying influence seems probable, as they are doubtless all more or less operative in the common exudative and trophic lesions known for convenience under the collective designation of "trench frost-bite."

From such a point of view, it is not so extraordinary that Herzog should regard the indiscriminate use of the strong German tincture of iodine with grave suspicion, and record¹ that in a great number of cases the wounded were found on admission to hospital to be suffering from severe dermatitis in the neighbourhood of their wound as the result of its use, with the occurrence locally of vesicles and even of superficial gangrene. In this connexion it is perhaps worth while remarking that it was recorded during the Balkan wars of 1912-13 that there were cases where wounds had been converted into slowly-healing sores as the result of copious applications of iodine to exposed muscular tissue, which in consequence became dry, brittle, and black, as though it had been charred.

The following are brief notes of my three cases. They all occurred in summer, and each of the patients was of the male sex, although, perhaps, neither of these factors is of any importance.

CASE I.

A. E. B., aged 28, with inflammation of a small bursa situated over the left patellar ligament (not the bursa patellae). He painted the swelling with iodine five days before coming to see me, and two days after this application the leg became painlessly ecchymosed from knee to ankle, round the entire circumference of the limb. When he presented himself the ecchymosis was at the purple stage and gave the limb a very peculiar appearance, almost as though it had been steeped in some dye.

CASE II.

B. B., aged 50; chronic synovitis of the left knee. On June 25th he was instructed to paint the knee daily with the tinctura iodi mitior. On July 4th he presented himself, and it was seen that he had a desquamating iodine dermatitis about the joint, with oedema of the corresponding leg and foot. The application of the iodine was stopped, but six days later it was found that numerous large pemphigoid bullae, with clear serous contents, had developed in the leg, ankle, and foot. As in the previous case, a widespread area that had had no contact with the iodine (but which had been affected by the oedema consequent on its use) was affected.

CASE III.

J. I., aged 52, came to me with an injured hand, having received, two days before I saw him, a lacerated wound over the ulnar side of the dorsum of his left wrist. The wound had been sutured, and the wound area disinfected with iodine at the time of injury, in the casualty department of a hospital near the place where he had been at work, and the yellow staining of the skin was quite evident. In twenty-four hours he returned, an iodine dermatitis with extensive bullous formation having developed locally, three days after the iodine solution had been applied as a wound disinfectant.

The foregoing are but three instances among 14,000 patients. Against them must be balanced all the many instances, in hospital and out of it, in which no ill effects of any sort have followed the reasonable and judicious use