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.

REFERENCES.

¹ Dr. Robert Hutchison, Alimentary Toxaemia and Intestinal Stasis, *Medical Review*, January, 1915; Mr. John Morley, Address on "Some Conditions that Simulate Chronic Appendicitis," *BRITISH MEDICAL JOURNAL*, 1914, vol. ii, p. 467. ² Dr. E. Hertoghe, Thyroid Insufficiency, *Practitioner*, January, 1915.

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

of iodine solutions. The conclusion is forced upon one that where there are no definite indications to the contrary (such as tender age), if the iodine be used in a way sanctioned by the dictates of common sense and experience, its recognized advantages as a primary wound antiseptic greatly outweigh any possible risk of severe reaction, such as might be caused by an idiosyncrasy non-existent in the great majority of persons. The so-called colourless tincture of iodine is of no advantage in this respect, as it contains no free iodine, and has none of the distinctive properties of that substance.

REFERENCE.

¹ BRITISH MEDICAL JOURNAL, March 6th, 1915, pp. 441-2.

Memoranda:

MEDICAL, SURGICAL, OBSTETRICAL

VASO-DILATORS IN THE TREATMENT OF HYSTERICAL APHONIA.

THE cause of functional failure of the great nerve centres may be imperfect blood supply or some primary defect in nutritive activity on the part of the nerve elements themselves. If the first hypothesis be correct the existence of vaso-constrictor nerves in the cerebral vascular system must be postulated. Owing to the researches of Wiggers, whose conclusions have been corroborated by Morison and Gulland, this hypothesis has now become an established fact. Dr. Charlton Bastian, in his highly interesting and instructive monograph, *Hysterical or Functional Paralysis*, written more than twenty years ago, observed that the absolutely sudden onset and cessation of functional paralysis which are occasionally met with point very strongly to angio neurotic spasm as the cause of the affection. This spasm need not be complete, occlusion of one-half or even one-third of the blood supply being sufficient. The cerebral vaso-constrictor filaments are not connected with the systemic vasomotor centre, though doubtless they have one of their own.

In connexion with this subject the following cases may be of interest.

CASE I.—C. S., aged 25 years, schoolmistress, had lost her voice for several days. After taking a few doses of nitroglycerine ($\frac{1}{10}$ gr. each), the aphonia completely disappeared, and did not recur.

CASE II.—A. C., aged 18 years, a domestic servant, had been aphonic for a year, during which period she had undergone much and varied treatment. Transitory benefit, lasting only a day or two at a time, resulted. On inhaling a capsule of amyl nitrite, her voice instantly returned. She has since been taking a mixture containing sodium and amyl nitrite, and during this time (a fortnight) she has constantly retained her voice.

Driffield.

JOHN R. KEITH, M.D.Aberd.

CAECUM IN LEFT INGUINAL HERNIA.

IN October, 1914, I was asked to see a Malay boy, aged 3 years, at Kudat in British North Borneo. The parents alleged that for some months previously a swelling had appeared at intervals in the left side of the scrotum, but had caused no trouble until that time, when it became persistent, tense, and inflamed. It proved to be a left inguinal hernia which had become strangulated.

I operated immediately, and was surprised to find that the hernial sac contained the whole caecum, the vermiform appendix, and part of the ileum. The intestine was nowhere badly injured, so it was returned to the abdomen, and the remainder of the operation completed according to the method of Bassini.

At the time of the operation I recollected having seen several similar cases recorded which were due to the fact that the caecum possessed a long mesenteric attachment, and had become displaced from its usual position in the right iliac fossa. I think this must have been the explanation in this case, inasmuch as the liver and spleen showed no transposition on palpation and percussion.

The child made an uneventful recovery.

Singapore.

JOHN F. HORNSEY, M.B., B.Ch.Oxon.

Reports of Societies.

HARVEIAN SOCIETY OF LONDON.

At a meeting on April 22nd, after the passage of a resolution of sympathy with the widow of the late president, Dr. Edgar G. Bulleid, Dr. G. DE B. TURTLE was unanimously elected president for the remainder of the session. Dr. F. E. BATTEN opened a discussion on *Cerebro-spinal meningitis*. He said the last epidemic in this country had been in 1907-8. The disease was, however, constantly present as an endemic disease, showing a seasonal variation, the greatest number of cases occurring during the months of February, March, and April, and affecting chiefly children. Flexner had produced the disease experimentally in monkeys, and he had shown that it was possible to save monkeys so affected by intrathecal injection of an immune serum obtained from a horse. The serum treatment had greatly diminished the mortality, but as there were several strains of the meningococcus, it was important to obtain a serum which was polyvalent to as many strains as possible. In regard to the injection of serum, Sophian had insisted on the importance of controlling the removal of cerebro-spinal fluid and the injection of serum by observation of the blood pressure, and for that purpose had advocated the use of the gravitation method. The speaker considered that the syringe method was a perfectly safe and more easily regulated method than the gravitation method. He considered soamin inadvisable owing to its liability to produce optic atrophy. Dr. DAVID NABARRO described the changes in the chemistry and cytology of the cerebro-spinal fluid in meningococcal meningitis, and the alterations brought about by injections of serum. He also showed a number of lantern slides of the meningococci in the cellular deposit of the cerebro-spinal fluid, and in culture. Dr. J. A. ARKWRIGHT, dealing with the epidemiology of the disease, said it had been shown by various observers that, though the carriers were usually free from the meningococci in two or three weeks, a small percentage were still carriers after two and even seven months, and Mayer had related a case probably existing two years. Carriers might develop meningitis after two or three weeks, and no doubt all cases were carriers for a longer or shorter period. Cases of meningitis must be looked upon as persons who, in the course of a pharyngeal infection, developed meningitis as a complication. Prophylaxis was then dealt with, the measures advocated being the detention and isolation of carriers early in the epidemic, whenever possible, the avoidance of overcrowding, and the breaking up of large bodies of troops into smaller units. The value of prophylactic vaccination was as yet uncertain. The variation of the number of carriers among contacts in different epidemics was alluded to. Among 300 soldiers who were contacts Dr. Arkwright and his colleagues only found four carriers. In other epidemics as many as 23 per cent. and 32 per cent. had been found by various observers. Dr. COLEBROOK, speaking of the treatment of meningococcus infections by vaccines, suggested that this should not be considered as alternative to the intrathecal injection of serum, but rather as complementary to it. By the use of serum one hoped to check the multiplication of meningococci in the cerebro-spinal fluid, and possibly to promote their destruction by phagocytosis, but it remained for the patient's own antibacterial defences to deal with the microbes which had established themselves in the meningeal and cortical tissues—the more serious factor in the infection. By the inoculation of vaccine into uninfected tissues one sought to whip up these antibacterial defences to a maximal effort. He referred briefly to his experience of about a dozen cases—some of the posterior basic, others of the epidemic type—of meningococcal meningitis in which vaccine had been used. He had several times seen the temperature come down and the patient's condition improve in a manner which strongly suggested that the inoculation of vaccine had exercised a favourable influence on the infection. But sometimes it seemed that very serious injury had been done to the central nervous system by the invasion of the cortex, blocking of foramina, etc., in the days or weeks of the disease before the commencement of vaccine treatment, and in these cases, although