remedy for diverse eye conditions but we can keep an open mind on the subject.

I am, etc.,

JAMES W. BARRETT.

MELBOURNE,
August 20, 1942.

UNUSUAL CASES OF CONJUNCTIVITIS

To the Editors of THE BRITISH JOURNAL OF OPHTHALMOLOGY.

DEAR SIRS,—In your October issue, Major E. F. King discusses four unusual cases of conjunctivitis in soldiers showing certain common features, which he thinks "group them as a clinical entity." In the last sentence of the conclusions he indicates that "the condition" is obscure in pathogenesis but expresses an interest in finding out if other surgeons have met with similar cases. This paragraph assumes the existence of a condition or entity into which his cases fit, but obviously is meant to welcome other opinion.

Having a long-standing interest in the aetiology of conjunctival disease, I venture to trespass on your space by offering some remarks. To be frankly critical I cannot see why these four cases should constitute a "group," "clinical entity" or "condition," and although I support Major King's idea in urging an attitude of enquiry towards the unfamiliar conjunctival affections which we are all liable to meet, I deplore any suggestion which might tend to establish another clinical conjunctival group on four cases, such as that named after Parinaud by H. Gifford in 1898.

Cases 1 and 4 appear, prima facie, to be so different as to make them mutually exclusive of any purely clinical group or entity. Conversely Case 1 resembles some published descriptions of Parinaud's syndrome so much more than it resembles Case 4, that it fits relatively well into that clinical picture. For the sake of clearness it may be recalled that the modern conception of a Parinaud's conjunctivo-glandular (or oculo-glandular) syndrome is based on three cases published by Parinaud in 1889 which appeared to him to form a clinical group.* Since then numbers of cases showing similar clinical features have been investigated by different observers with a view to isolating what one might term specific aetiological entities from the parent generic clinical group. Eventually, as S. Gifford pointed out, the Parinaud syndrome resolved itself into a complex consisting of an aetiologically proven group, such as Verhoeff's Leptothricosis conjunctivae, certain cases of conjunctival tuberculosis, Pascheff's conjunctivitis necroticans, conjunctival tularensis, etc., plus an unproven residue into which,

*(cf. H. Gifford, Brit. Jl. of Ophthal., p. 350, 1924);
on failure to establish aetiological criteria, those cases were lumped which showed a reasonable clinical resemblance to the cases from which the syndrome derived its name. An important recent addition to the proven group is the conjunctivitis due to the mycobacterium of Castelli and Molina.

Since it is proven aetiology rather than clinical manifestations which gives any individual case a positive position in the syndrome, it is necessary that investigations to exclude or establish potential causative agents should be exhaustive. Bacteriological and histopathological technique already known to have been successful in demonstrating a particular infection, must be scrupulously observed in any case which appears to be within the somewhat liberal clinical confines of the conjunctivo-glandular syndrome, before admitting defeat and placing it in the negative or unproven compartment thereof.

It cannot be said of Case 1 that attempts to isolate aetiological agents were exhaustive, although considerable efforts were made to establish a diagnosis. In so far as some of the necrotic foci were concerned the early microscopical changes were not typical of any members of the proven group. The general tissue response was one which might well be found outside the characteristic foci in several infective conditions. There was a tissue eosinophilia in the early stages, Verhoeff does not consider this a feature of leptothricosis; others have touched on the possible significance of blood eosinophilia in such cases (Gifford, Wright). Whatever the significance of this tissue change it was not noted when the pathological report on Case 1 quoted by Major King was made. This must have been based on a biopsy done after the seventh month of the affection, when one might expect to find characteristic primary tissue changes somewhat obscured by the reactions to secondary infections and previous traumata. In the earlier stages of the affection when the case happened to be under my care such traumata occurred; there were two biopsies and a total tarsorrhaphy with tarsal mattress sutures.

It may be said here that the histopathological demonstration of leptothrix is by no means easy and may elude the most painstaking pathologist unless the Verhoeff technique is followed exactly, even as regards excising the necrotic foci at biopsy. Verhoeff himself emphasised this difficulty and expressed surprise that for years after his original description, S. Gifford was the only ophthalmologist to confirm his findings. This was not because others did not try, but because in some cases at least the biopsy and histopathological technique were not carried out with the attention to detail which is essential to success.

In some suspected cases the histopathological picture alone is not necessarily clear enough to exclude leptothricosis, unless the section goes through one of the small necrotic foci.
It was because of these difficulties that in 1937 I resorted to a bacteriological approach and described a method of isolating the leptothenrix on specially selected media by means of the preauricular gland puncture technique first adopted by Wherry and Rae (1918). Verhoeff had tried this method in one case and failed (private communication); although he had of course isolated the organism from the conjunctiva and fully described its distinctive features in culture. Had I adopted a bacteriological technique sooner I feel that some of the unidentified Parinaud syndrome cases of which I have notes would have been placed in the leptothenrix group. It is not likely that Boston had a monopoly of leptothenrixiosis, yet up to 1933, when Verhoeff had confirmed 45 cases by staining and sometimes culture, very few cases of confirmed leptothenrixiosis conjunctivae had been published elsewhere.

This gives an idea of the necessity for meticulous technique. Now in Case 1 an exacting bacteriological technique for the isolation of leptothenrix and certain other organisms was not adopted, since the best media and conditions of cultivation were not available in the laboratories where the case was originally investigated.

But although the laboratory investigation was not adequate to exclude Verhoeff's leptothenrixiosis or, say, the mycobacterial granulomatosis of Castelli and Molina, it was probably sufficient to exclude Tuberculosis, human and bovine (thanks to colleagues in the Royal Veterinary College, Aldershot). There were, however, at least two clinical features against leptothenrixiosis, viz., ulceration of the subconjunctival necrotic areas and a protracted course.

As far as I remember Verhoeff does not feature conjunctival ulceration; but the surface of the conjunctival fornix in Case 1 was broken when I first saw it within a fortnight of the onset of the symptoms. Verhoeff's cases were practically all of relatively short duration, lasting weeks, not months. Since also, lesions of the cornea such as developed in Case 1 in the latter stages are not a feature of leptothenrixiosis, there are strong points against Case 1 being in the leptothenrix group, but this does not mean that it can be excluded from the conjunctivo-glandular syndrome. My notes indicate that at least two of my own cases allocated to the unproven group of the syndrome were of over 8 months duration. In these, Tuberculosis, human and bovine, was excluded in circumstances affording exceptionally good laboratory facilities. I think, but cannot be sure without the original reference which is not available, that one of Parinaud's cases lasted for 6 months.

In view of the above it would appear better to place Case 1 in the undiagnosed compartment of the conjunctivo-glandular syndrome rather than in clinical association with Major King's fourth case, which has no apparent claim to this classification. I will not attempt to assess the position of Cases 2 and 3 as to their clinical
relationship with 1 or 4, since I know nothing of the detail of their investigation. The drawings, I feel, do not help sufficiently in making a critical clinical comparison.

There is an aetiological factor in connection with Case 1 which had to be considered at the beginning, viz., a self-inflicted injury. There were features present when the patient was first seen which strongly suggested the effects of an irritant on the conjunctiva. There was also a definite history of a cinder burn. In those localities where the effects of irritants on the conjunctivae are an every-day occurrence, it is not uncommon to see lesions closely resembling the condition of Case 1 in its early stages. It was thought, however, that the eye did not behave like a straight-forward burn lesion. It seemed therefore desirable to eliminate a self-inflicted injury by tarsorrhaphy and security bandages, with observation in a detention ward. The resulting evidence was against a self-inflicted injury, but not against the necrotic ulceration having resulted from an irritant. That the process should have continued so long with recurring foci of necrosis is unlike the course of the average conjunctival lesion due to an irritant, and suggests that some chronic infective granulomatous process played at least a secondary part.

Yours truly,

ROBERT E. WRIGHT.

ALDERSHOT,
November 20, 1942.

SURGICAL DIATHERMY IN CHOROIDAL MELANOMA

To the Editors of The British Journal of Ophthalmology.

DEAR SIRS,—I was much interested in Messrs. Savin and Pritchard's article on "A Choroidal Melanoma treated by Surgical Diathermy," in the December number of the Journal. It illustrates admirably the value of this form of attack for the destruction of certain neoplasms within the eye, and I think its value for some other localised fundus conditions might well repay investigations. I have in mind more especially, localised retinal angiomata and the affected vessels in Eales' Disease; without having tried it I suggested that it might prove of value in small retinal gliomata (Trans. Ophthalm. Soc. U.K., 1935, Vol. LV, p. 19). My present object, however, is to express doubt as to whether Messrs. Savin and Pritchard's case is properly described as a melanoma of the choroid.

A good many years ago I published in The Moorfields Reports (I regret I have not the precise reference by me) what I believe was the first instance in which a melanoma of the choroid, having been examined during life, was afterwards obtained for pathological examination owing to the death of the patient, from myasthenia