INSECT STING OF THE LID—AND A SEQUEL*

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An anxious parent brought her 6-year-old son to me 2 or 3 years ago because he had been "stung on the eye by a bee". A cheerful and cooperative child showed me an irritable watery eye with some injection. It was quite definite that the insect had attacked the upper lid at about its mid point, for the site of puncture had been quite obvious at the time; no sign of this remained by the time the patient reached me 2 days later. There was no corneal stain, nor any sign of abnormality to be discovered on the upper tarsal conjunctiva—certainly no sting nor puncture hole. I was at a loss to explain the occurrence of injection and irritation from what I then thought to have been no more than a skin lesion; I prescribed some simple drops and asked that the patient should be brought back in 2 days' time.

On his return the eye was as irritable as ever, and fluorescein staining and examination under the slit lamp revealed a multitude of the finest imaginable linear or slightly curved scratches. I had never seen such a delicate tracing. Eversion of the upper lid revealed, after close inspection, a slightly raised central area, a little redder than the rest of the conjunctiva; by manipulation of the lid after cocainization of the eye the business end of a sting was made to extrude itself; this was grasped with forceps and withdrawn. It is clear that the sting pierced the tarsal plate from the skin surface and intermittently protruded so as to touch the cornea—for this was non-staining at the time of the first visit, though the eye had obviously suffered recent irritation.

The sting on examination proved to be indeed that of a honey bee; the characteristic barbs are unmistakable, and are shown here in surface and side view (Figs 1 and 2). These barbs retain the sting in position and

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indeed assist its deeper penetration even when the bee has departed; reflex movements of the lancets continue and poison continues to be injected into the wound for some time afterwards if the sting is allowed to remain. This is a most interesting phenomenon, easily confirmed, which I have many times experienced.

The eye recovered from the moment of removal of the sting, and I have not heard of the patient again.

Bell and Weir (1947) read a paper before the Ophthalmological Society of the United Kingdom at the Congress held in Glasgow under the presidency of the late Professor Ballantyne, in which they set out to answer the question:—why do we not see blurred images on transferring our fixation from one point to another? Their thesis was illustrated by an ingenious experiment erected before the audience; members had to transfer their gaze from a right-hand fixation point to a left-hand fixation point, between which there was a patch of light flickering at 120 times per second. A series of bright patches was seen extending right and left to a different extent with different observers.

The paper was interesting and so was the discussion. My contribution to this was to say that, when we make horizontal glancing movements of the eye, other than the very shortest, we habitually close our eyes during the movement, so the question raised was quite academic; blurred images were not seen because the eyes were closed. To me this was a matter of common observation; the eyes are as it were “swept across” by a blink. Further subsequent observation has done nothing to alter my contention; and I was astonished to find at the meeting that—as the account says—“some dubiety of opinion was expressed by the audience on this point”. It is perfectly possible to swing one’s gaze across with the eyes open, as a conscious effort; but the natural movement is accompanied by a blink.

Immediately my small patient had left my house for the second time, relieved of this sting, my thoughts turned to this debate in Glasgow of some years before—for all the fine scratches on his cornea were horizontal or nearly so, some with a slight curvature. This appeared to suggest that the orbicular action in glancing movements is firmer than that employed during the simple blink reflex with the eye stationary. I do not know whether that is a fact, or, if it is, whether physiologists are aware of it, and of its significance.

What interested me even more, however, was that it appeared to prove in a dramatic and conclusive manner my contention that the lids close during glancing movements.

REFERENCE

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