# LETTERS TO THE EDITOR

# A patient's ingenuity in the management of lagophthalmos

SIR,—Suffering from lagophthalmos after repair of bilateral blepharoptosis, a 65-year-old man fitted rolls of cloth to an old spectacle frame to elevate his lower lids, thus relieving his symptoms at night.

A 65-year-old male underwent repair of bilateral blepharoptosis with a fascia lata sling. After surgery he suffered from lagophthalmos and exposure keratitis of the lower third of both corneas despite conservative treatment with artificial tears and ocular lubricants. While awaiting surgery to repair the overcorrected



Figure 1: Device for elevation of lower eyelids, showing the rolled bands of cloth, mounted on struts.

### Optimal surface for impression cytology

SIR,—Impression cytology has been gaining popularity as a non-invasive method of studying the conjunctival surface by using Millipore filter paper. This filter paper has a smooth, shiny surface on one side and a dull, slightly rough surface on the other side. It has been claimed that the dull surface provide a better yield of conjunctival cells while the smooth surface is more suitable for studyiung mucus.<sup>12</sup> Moreover, the Millipore filter paper with surfactant, which is normally present in the filter paper, has been claimed to be less suitable for obtaining conjunctival cells than one without surfactant.<sup>1</sup> On the other hand Tseng<sup>3</sup> did not find any difference in cell adhesiveness

#### TABLE I Yield of cells



0=nil to very few cells. 1=few cells. 2=many cells.3=abundant cells.

ptosis, he looked for a way to alleviate irritation and pain which bothered him espcially at night. When he had not found an efficient way to bring both upper lids down, and thus close the eyes, he tried to achieve complete eyelids closure by elevation of the lower lids.

He built a device composed of two strips of flannel cloth rolled and mounted on hinges, and attached to an old spectacle frame (Fig 1). By wearing the glasses and pulling the ends of the rolled strips downwards (like shades), both lower lids became elevated, and thus enabled the eyelids to close (Fig 2). Wearing these spectacles at night during sleep, our patient was relieved from his symptoms.

We submit this report not only to show the patient's ingenuity but also to suggest that similar devices might be used in some cases of lagophthalmos as a temporary means of treatment.

ISAAC ASHKENAZI MICHAEL CAHANE NACHUM ROSEN Department of Ophthalmology, Goldschleger Eye Institute, Sheba Medical Center, Tel-Hashomer, Israel



Figure 2: The patient wearing the device which causes elevation of both lower lids.

between the two surfaces of the filter paper or between the Millipore filter paper which has a surfactant and that without.

We wish to report the results of a masked study which was devised to evaluate the adhesive qualities of four different paper surfaces for sampling conjunctival epithelial cells.

Fifteen volunteers were recruited for the study. For each subject one of each of four Millipore filter paper surface types was applied to one of each of four sampling sites. The four sampling sites were the temporal and nasal bulbar conjunctiva of both eyes of each subject. The filter paper surfaces used were dull dry and smooth dry, both with surfactant, and dull wet and smooth wet, both without surfactant. The type of collecting surface was assigned strictly at random by tables of random numbers and standard methods, to the sampling location.

The results are shown in Table I. Friedman's method for non-parametric analysis of variance for randomised blocks+ together with the related critical range method of Wilcoxon<sup>4</sup> were applied to the data. Dull surfaces were found to give a significantly better yield of epithelial cells than did the smooth type (0.01 < 0 p < 0.05)for dry filter paper; p < 0.01 for wet filter paper). Adams<sup>1</sup> and Nelson et al<sup>2</sup> also found the dull surface to be superior. On the other hand the performance of our filter paper types did not alter significantly with the presence or absence of surfactant (p > 0.05 for both dull and smooth surfaces). Adams' finding that the presence or absence of surfactant affected the collection process is therefore not replicated in our study.

R F REFAAT D ALLAN Tennent Institute of Ophthalmology University of Glasgow, Western Infirmary, 38 Church Street, Glasgow G11 6NT

- 1 Adams AD. The morphology of human conjunctival mucus. Arch Ophthalmol 1979; 97: 730-
- 2 Nelson JD, Havener VR, Cameron JD. Cellulose acetate impressions of the ocular surface. Arch Ophthalmol 1983; 101: 1869-72.
- 3 Tseng SCG. Staging of conjunctival squamous metaplasia by impression cytology. Ophthalmology 1985; 92: 728-33.
  4 Colquhoun D. Lectures on biostatistics. Oxford:
- 4 Colquhoun D. Lectures on biostatistics. Oxford: Clarendon Press, 1971: ch. 11.

### Ocular melanoma

SIR,—With regard to the correspondence on ocular melanoma by A B Tullo *et al*<sup>i</sup> and J Hungerford<sup>2</sup> we would like to report some of our experience with radioimmunoscintigraphy (RIS) with antibody 225.28S in ocular melanoma.

We initially performed RIS in 16 patients with a certain clinical diagnosis of malignant melanoma. Images were made at six hours after injection of the antibody. Planar scintigraphy yielded detection of the melanoma in only six cases (37.5%). The use of a double pinhole collimator showed significantly higher activity in the melanomatous eve in 13 of 16 cases (81%).3 RIS was also performed in a second group of five patients with variable diagnoses. The diagnosis was based on the clinical course and the results of other diagnostic tests. In one case we are not sure of the diagnosis naevus; however, the patient has been without clinical signs of growth of the lesion for four years now. RIS with a regular gamma camera was negative in all cases (Table I). Pinhole scintigraphy yielded several false positive results and therefore is not reliable.

To increase the sensitivity of RIS we decided to perform planar scintigraphy at four and six hours after injection as well as single photon emission computerised tomography (SPECT) at six hours after injection.<sup>4</sup> The second image enables us to measure the tracer uptake over a course of time. Tracer uptake in the tumour can be seen at four hours after injection and becomes more clearly delineated six hours after injection. In a recent series of six melanoma patients five tumours could be visualised with planar RIS or SPECT (83%).

From these results we consider that RIS in melanoma patients can be a helpful additional diagnostic investigation provided the technical conditions are carefully considered. The