Technical note

Use of eyewear for high definition video recording in surgical training

A.M. Fry a,*, R.L. Orr a, A. Patterson b, P. Doyle a

a Department of Oral and Maxillofacial Surgery, Chesterfield Royal Hospital, Calow, Chesterfield, Derbyshire, S44 5BL, UK
b Department of Oral and Maxillofacial Surgery, Rotherham Hospital, Moorgate Road, Rotherham S60 2UD, UK

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The requirement of the European Working Time Directive (EWTR) that operating time for trainees should be reduced has highlighted the need to maximise the educational benefits from every encounter.1 The ability to video procedures from the operator’s perspective offers a unique opportunity for in-depth analysis of surgical performance, and provides objective feedback that can then be used for appraisal and assessment.

The use of head-mounted cameras is not new, but the equipment used previously tended to be rather cumbersome and expensive.2 Modern small digital video recorders can now be incorporated into spectacle frames with increased definition. We have used the Sunnycam® (Nemesis GB Ltd, Worcester, UK) high definition (HD) video recording sunglasses (with the patient’s consent) to record operations for teaching and training purposes (Fig. 1). The sunglasses are inexpensive, lightweight, and cable-free during use. An additional benefit is that the clear wraparound lenses also protect the eyes. The rechargeable battery and SD (secure digital) memory card are incorporated into the arms of the glasses, and the camera is on the bridge of the nose. We have used the glasses to record procedures in theatre, as well as in outpatients.3 The camera, which can autofocus and accommodate for any changes in light levels, is capable of recording up to 2-3 hours of HD footage 720p (1280 x 720) with accompanying audio (Fig. 2).

With continuing innovation and development of recordable eyewear it is also likely that video recordings of procedures will eventually form part of patients’ records.4 In view of the current trend for increased scrutiny and audit of outcome, the video recordings can also provide the surgeon with objective evidence that supports good practice.
Conflict of Interest

The authors have no conflicts of interest.

References