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REGULAR FEATURE

Ujuzi (Practical Pearl/*Perle Pratique*)



P.K. Forson^a, M. Osei-Ampofo^{a,*}, L. Ofori-Boadu^a, A.P. Safo^a, R. Oteng^b, G. Oduro^a, P. Donkor^c

^a Emergency Medicine Department, Komfo Anokye Teaching Hospital, Kumasi, Ghana

^b University of Michigan, Ann Arbor, USA

^c Kwame Nkrumah University of Science and Technology, Kumasi, Ghana

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Ujuzi means skills in Swahili and is intended to be a regular feature for colleagues to share practical interventions, innovations and novelties that have proved useful in the management of patients in the prehospital environment or emergency centre. You can let Ujuzi know about your practical ideas by emailing practicalpearl@afjem.com.

Use of fluorescein dye to detect broken contact lens pieces

Presentation with a painful eye is not an unusual presentation in the emergency centre. Common causes for pain are related to corneal abrasion due to scratching, cutting or abrasion of the thin, protective coat of the exposed anterior portion of the ocular epithelium.¹ Contact lens related eye pain is a less frequently seen cause.² A contact lens may get broken during insertion, removal or as a result of direct trauma to the eye.^{3,4} Identifying all the pieces of a broken contact lens in the eye may however be somewhat of a challenge. Needless to say, it is important to remove all of the pieces of the contact lens so no further damage is caused to the eye and to improve the patient's comfort.

A simple solution to find the pieces is to instil fluorescein dye topically into the eye and to use a blue light to examine. Fluorescein dye is readily absorbed into the gel matrix of contact lens (Fig. 1).² Under a blue light, the pieces of the contact lens will become vastly more identifiable. Once the pieces have been removed, re-examine the eye for corneal abrasions and treat appropriately if present.³

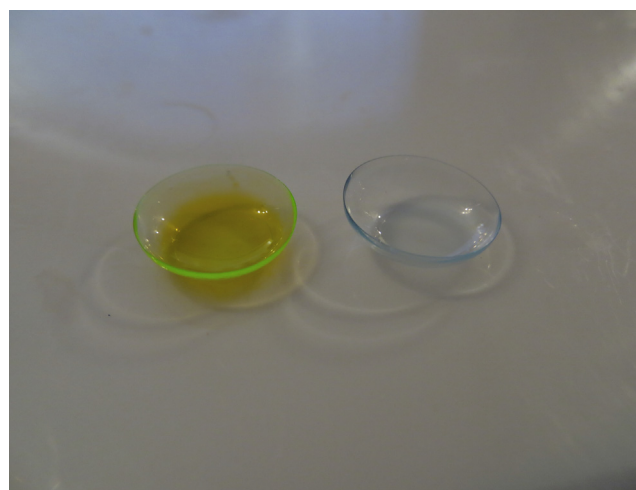


Figure 1. Fluorescein dye is readily absorbed into the gel matrix of a contact lens.

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* Correspondence to M. Osei-Ampofo. maxwelloseiampofo@yahoo.com

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References

1. Wilson SA, Last A. Management of corneal abrasion. *Am Fam Physician* 2004;**70**(1):123–8.
2. Nichols JJ, Sinnott LT. Tear film, contact lens, and patient factors associated with corneal staining. *Invest Ophthalmol Vis Sci* 2011;**52**(2):1127–37. <http://dx.doi.org/10.1167/iovs.10-5757>.
3. Wipperman JL, Dorsch JN. Evaluation and management of corneal abrasions. *Am Fam Physician* 2013;**87**(2):114–20.
4. Paete WF. Work related eye injuries and illnesses. *Am Fam Physician* 2007;**75**(7):1017–22.