

DEWS	DRY EYE: DIAGNOSTIC TEST TEMPLATE	
RAPPORTEUR	Desmond Fonn	Mar 19 th 2006
TEST	Bulbar conjunctival hyperaemia scales	
TO DIAGNOSE	To quantify the degree of redness of the bulbar conjunctiva in any inflammatory condition of the eye.	REFERENCES (see below)
VERSION of TEST	[V1]	CCLR (adapted) scales
DESCRIPTION	The degree of bulbar conjunctival redness in a patient is quantified by comparison with a set of photographic images.	
CONDUCT of TEST	<p>The observer compares the appearance of the patient's bulbar conjunctiva at the slit lamp, with that of a set of CCLRU hyperaemia standards. These provide 4 images of graded redness (see chart on page 3).</p> <p>Findings are recorded on CCLR-designed, anchored, visual analog scale (0-100). (-see chart below). Any or all of the 4 quadrants are graded, and a value between 0 and 100 is assigned on the visual analog scale.</p> <p>Results are entered into a standard form. [Hypertext link to standard form, to be established].</p> <p>The CCLRU Grading Scales Chart provides images of : Bulbar redness; Limbal redness; Upper tarsal conjunctival redness; Upper tarsal conjunctival roughness assessed by specular reflection; Upper tarsal conjunctival roughness assessed with fluorescein; Corneal staining by type, depth and extent; Lower bulbar conjunctival staining.</p>	
Web video	Not available	
Materials:	<ul style="list-style-type: none"> • CCLRU (Cornea and Contact Lens Research Unit) photographic poster • CCLR (Centre for Contact Lens Research) biomicroscopy form 	
Standardization	Time of day [<input checked="" type="checkbox"/>] Temperature [<input type="checkbox"/>] Humidity [<input type="checkbox"/>] Air speed [<input type="checkbox"/>] Illumination [<input checked="" type="checkbox"/>]. <input checked="" type="checkbox"/> Assumed to influence.	
Sensitivity	(true positives) [<input type="checkbox"/>]	
Specificity	(100 – false positives) [<input type="checkbox"/>]	
Test problems	Inter observer variability being analysed -	
Test solutions	Improvements: increase number of photographs to 10 (this is an ongoing project) to increase rating sensitivity	
FORWARD LOOK	Use objective technique (spectroradiometer) to measure bulbar redness developed by Dr Trefford Simpson.	

Glossary	CCLR: Centre for Contact Lens Research	
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CCLRU GRADING SCALES

Cornea and Contact Lens Research Unit, School of Optometry, University of New South Wales

	1. VERY SLIGHT	2. SLIGHT	3. MODERATE	4. SEVERE
BULBAR REDNESS				
LIMBAL REDNESS				
LID REDNESS (area 2)				
LID ROUGHNESS: WHITE LIGHT REFLEX (areas 1,2)				
LID ROUGHNESS: FLUORESCCEIN (area 2)				
CORNEAL STAINING: TYPE				
CORNEAL STAINING: DEPTH				
CORNEAL STAINING: EXTENT (area 5)				
CONJUNCTIVAL STAINING				

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