

<b>DEWS</b>	<b>DRY EYE: DIAGNOSTIC TEST TEMPLATE</b>	
<b>RAPPORTEUR</b>	A.J.Bron	16 <sup>th</sup> Oct 2004
<b>TEST</b>	<b>Mixed tests</b>	
<b>TO DIAGNOSE</b>	To differentiate SSdry eye from nonSS-dry eye	REFERENCES
<b>VERSION of TEST</b>	[ V 1 ]	Shimazaki 1998
<b>DESCRIPTION</b>	Various tests	
<b>NATURE of STUDY</b>	Comparison of 27 SS with 29 age- and gender- matched patients with nonSS dry eye.	
<b>CONDUCT of TEST</b>	<p><b>Tests conducted in this order:</b></p> <p><b>Fluorescein and RBS</b>  2µl of 1:1 solution of 1% fluorescein with 1% bengal rose (Toda, Tsubota 1993)  Cornea grading: fluorescein; 0-3  Conjunctival/cornea grading: 1-9 (van Bijsterveld 1969)</p> <p><b>BUT</b>  Average of 3 tests.</p> <p><b>Schirmer -1</b>  <b>Cotton thread</b> (Sakamoto et al. 1993)  Lower lateral lid margin  15 seconds</p> <p><b>Tear clearance</b> (Xu et al. 1995)  10 µl of 0.5% fluorescein with oxybuprocaine (Benoxil)  Schirmer performed for 5 minutes  Dilution (1; ½; ¼; 1/8; 1/16/1/32/;1/64;1/120;1/256)  expressed as the log</p> <p><b>Tear Function Index</b> (TFI) derived from Schirmer value divided by tear clearance (Xu et al. 1995)</p> <p><b>Tear evaporation</b> (at a separate visit)  <b>Meibography:</b> (some performed on other days)  Transillumination with L-3920 transillumination device (Inami, Co. Tokyo)  Grade 0: No gland drop out  Grade 1: Drop out in less than half of lower lid  Grade 2: Drop out in more than half of lower lid</p> <p><b>Meibomian Expression: (obstruction)</b>  Degree of ease of expressing Meibomian secretion from the upper tarsus:  Grade 0: clear meibum easily expressed  Grade 1: cloudy meibum expressed with mild pressure  Grade 2: meibum cannot be expressed even with hard pressure.</p>	<p>Toda, Tsubota 1993  van Bijsterveld 1969</p> <p>Sakamoto et al. 1993</p> <p>Xu et al. 1995</p> <p>Shimazaki et al 1995</p>
<b>RESULTS of STUDY</b>	Fluorescein and RB scores higher in SS than noSS dry eye (p<0.0001)	Shimazaki 1998

Comparing tear tests in SS and nonSS dry eye			
	SS n=27	nonSS n=29	P
<b>FStain</b>	5.04 ±2.79	1.59 ±0.91	<0.0001
<b>RBStain</b>	4.74 ±260	1.52 ±1.53	<0.0001
BUT	2.85 ±2.84	4.48 ±3.25	0.069
Sch-1	2.67 ±1.78	3.24 ±1.41	0.18
Clearance	3.41 ±1.12	3.43 ±1.14	0.94
TFI	35.6 ± 44.5	41.4 v31.3	0.57
Thread	16.9 ±6.54	18.8 ±9.11	0.52
<p>BUT not different between groups.  Schirmer: No difference between groups.  Thread Test: No difference between groups  Clearance: No difference between groups.  TFI: No difference between groups.  Evaporation rate greater in the SS than the nonSS group (p=0.0048) with normal blinking.</p> <p>Meibomian drop out ≥ 1 noted in 84.2 % (16/19) in the SS group and 55.6% (15/27) in the nonSS group (P=0.017).  The incidence of severe obstruction (grade3) was also higher in the SS group: (38.9% -7 versus 11.1% - 3 eyes) (P = 0.028)</p>			
<b>Web Video</b>	NA		
<b>Materials:</b>	• Benoxil: Santen Pharmaceutical Co. Osaka)		
<b>Standardization</b>	Different requirements for each test.		
<b>Diagnostic value</b>	This version : [ ] Other version: [ ]		
<b>Repeatability</b>	Intra-observer agreement. [ - ] Inter-observer agreement. [ - ]		
<b>Sensitivity</b>	<b>(true positives)</b> [ - ]		
<b>Specificity</b>	<b>(100 – false positives)</b> [ - ]		
<b>Test problems</b>	Note, BUT measured after rose bengal instillation. Could RB influence the BUT?		
<b>Glossary</b>	TFI: Tear Function Index		

## References

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