| DEWS | DRY EYE: DIAGNOSTIC TEST TEMPLATE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RAPPORTEUR | A.J.Bron |  |  |  |  | $16^{\text {th }}$ Oct 2004 |
| TEST | Schirmer-1 Test -without anaesthesia |  |  |  |  |  |
| $\begin{aligned} & \hline \text { TO } \\ & \text { DIAGNOSE } \end{aligned}$ | Aqueous deficient dry eye as a component of Sjógren's Syndrome. |  |  |  |  | REFERENCES <br> Vitale et al. 1994 |
| VERSION of TEST | [V 1] |  |  |  |  |  |
| DESCRIPTION | An estimation of tear flow stimulated reflexly by insertion of a filter paper into the conjunctival sac. |  |  |  |  |  |
| NATURE of STUDY | 22 centres from 11 countries provided data on a total of 447 SS and 246 controls ( $2461^{\circ} \mathrm{SS} ; 2012^{\circ} \mathrm{SS} ; 113$ connective tissue disease without SS and 133 normal controls) |  |  |  |  |  |
| CONDUCT of TEST | Sch-1: without anaesthetic, <br> Standard Schirmer Strips <br> Placed over the lateral part of the lower lid <br> Eyes closed <br> Read length from notch to edge <br> 5 minutes |  |  |  |  |  |
| RESULTS of STUDY | See Mixed Tests -European criteria |  |  |  |  |  |
| Web Video | Not available: |  |  |  |  |  |
| Materials: | - Schirmer papers (source not stated) |  |  |  |  |  |
| Standardization | Time of day $[\sqrt{ }]$ Temperature $[\sqrt{ }]$ Humidity [ $\sqrt{ }$ ] Air speed $[\sqrt{ }]$ Illumination $[\sqrt{ }]$. Assumed to influence. |  |  |  |  |  |
| Repeatability | Sch-1: <br> Intra-observer agreement. [ - ] <br> Inter-observer agreement. [ - ] |  |  |  |  |  |
| Sensitivity | (true positives) $\quad[75.1 \%] \leq 5 \mathrm{~mm}$ cut off: |  |  |  |  |  |
| Specificity | (100-false positives) [76.4\%] $\leq 5 \mathrm{~mm}$ cut off: |  |  |  |  |  |
| Sensitivity | (true positives) [82.7\%] $\leq 10 \mathrm{~mm}$ cut off: |  |  |  |  |  |
| Specificity | (100 - false positives) [67.9\% ] $\leq 10 \mathrm{~mm}$ cut off: |  |  |  |  |  |
| Other Stats | Degree of agreement between tests using Cohen's kappa (Gower's similarity coefficient) <br> Sch-1 and RBS said to have an 'acceptable' degree of concordance |  |  |  |  |  |
|  |  | Sch-1 | RBS | BUT | TFLL |  |
|  | Sch-1 | $\begin{array}{\|l\|} \hline 1 \\ 1 \\ \hline \end{array}$ | $\begin{aligned} & \hline 0.415 ; \\ & 0.706 \\ & \hline \end{aligned}$ | $\begin{aligned} & 0.240 ; \\ & 0.645 \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 0.374 ; \\ 0.699 \\ \hline \end{array}$ |  |
|  | RBS |  | 11 | $\begin{aligned} & 0.251 ; \\ & 0.617 \end{aligned}$ |  |  |
|  | BUT |  |  | 1 |  |  |
|  | TFLL |  | $\begin{aligned} & \hline 0.399 ; \\ & 0.692 \end{aligned}$ | $\begin{aligned} & 0.335 ; \\ & 0.706 \end{aligned}$ | $1$ |  |

## References:

Vitali C, Moutsopoulos HM, et al. (1994). The European Community Study Group on diagnostic criteria for Sjogren's syndrome. Sensitivity and specificity of tests for ocular and oral involvement in Sjogren's syndrome. Ann Rheum Dis 53(10): 637-47.

