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ORIGINAL ARTICLE

Self versus examiner administration of the Ocular Surface Disease Index©

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Dry eye;
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Abstract
Purpose: To compare the difference in Ocular Surface Disease Index© (OSDI) scores when participants were given the OSDI to complete on their own (self-guided, SG), versus under the guidance of the examiner (examiner-guided, EG).
Methods: 100 participants enrolled in this prospective two-visit study (fifty under-45 years old, 38F/12M; and fifty 45 years-and-older, 42F/8M). Participants who scored ≥1 on the Subjective Evaluation of Symptoms of Dryness (SESoD) were included in this study. Participants completed the OSDI SG during the first visit. Participants returned the next day and repeated the OSDI, but with EG (with standardized instructions). Participants were under deception and believed that they were comparing the OSDI to the SESoD.
Results: The mean OSDI score of the SG and EG administration was 32.0 ± 17.3 and 33.8 ± 19.6 respectively ($p > 0.05$) with 95% limits of agreement between −20.6 and +24.2. The correlation between SG and EG administration was Spearman's $r = 0.81$, $p < 0.01$. The mean difference between SG and EG was not significant ($p > 0.05$) for both the under-45 group, and 45-and-older group. The 95% limits of agreement for the under-45 group were smaller than the 45-and-older group (under-45: [−15.5, +13.1,], 45-and-older: [−23.3, +32.2]). A significant difference was found between 8 of the 12 questions items (all $p \leq 0.01$). However, the mean difference for each was <0.6 and was not considered to be clinically significant.
Conclusion: There was no clinically significant difference in OSDI score between SG and EG administration, however having instructions provided with EG administration affected variability of scores in the older group more than the younger group.

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PALABRAS CLAVE
Ojo seco;
Cuestionario;
Administración;
Ocular Surface Disease Index©;
Síntomas

Comparación entre la administración auto-guiada y guiada por un examinador, de la prueba ''Ocular Surface Disease Index©''

Resumen
Objetivo: Comparar la diferencia de las puntuaciones de la prueba Ocular Surface Disease Index© (OSDI) cuando a los participantes se les solicitó que completaran dicha prueba por sí mismos (auto-guiado - SG), y cuando la prueba fue guiada por un examinador (EG).
Métodos: Se seleccionó a 100 participantes en este estudio prospectivo de dos visitas (cincuenta menores de 45 años, 38F/12V, y cincuenta mayores de 45 años, 42F/8V). Se incluyó en el estudio a aquellos participantes con una puntuación ≥1 en la prueba de evaluación subjetiva de los síntomas del ojo seco (SESoD). Los participantes completaron el test OSDI SG durante la primera visita. Al día siguiente regresaron y repitieron el OSDI, pero con un EG (instrucciones estandarizadas). Se les sometió a engaño, y creyeron que estaban comparando el OSDI con el SESoD.
Resultados: La puntuación media de la prueba OSDI para las intervenciones SG y EG fue de 32,0 ± 17,3 y 33,8 ± 19,6 respectivamente ($p > 0,05$), con un 95% de límite de acuerdo entre -20,6 y +24,2. La correlación entre las intervenciones SG y EG, utilizando el coeficiente de Spearman, fue de $r = 0,81$, $p < 0,01$. La diferencia media entre SG y EG no fue significativa ($p > 0,05$) para ambos grupos de edad. El 95% de límite de concordancia para el grupo de menores de 45 años [−15,5,+13,1] fue menor que para el grupo de mayores de 45 años [−23,3,+32,2]). Se encontró una diferencia significativa en 8 de las 12 cuestiones (en todos ellos, $p \leq 0,01$). Sin embargo, la diferencia media para cada uno de ellos fue <0,6, por lo que no se consideró clínicamente relevante.
Conclusión: No se produjo una diferencia clínicamente significativa entre las puntuaciones de la prueba OSDI entre las intervenciones SG y EG, aunque el disponer de instrucciones aportadas por el administrador EG afectó en mayor medida a la variabilidad de las puntuaciones del grupo de mayores de 45 años en comparación al grupo de menores de dicha edad.

Introduction

It is well recognized that dry eye syndrome (DES) is a condition driven mainly by symptoms, and that DES can have a negative impact on quality of life.[1] While the symptoms of DES have been repeatedly shown to have poor correlation with diagnostic signs,[2–5] dry eye questionnaires are frequently used in the diagnosis, management and monitoring of DES.[5–7] In a recent review, 19 questionnaires were identified that may be used specifically for dry eye patients to assess symptoms, measure health-related quality of life (HRQL) and visual function.[7] These questionnaires differ in their developmental methodology, design, and mode of administration in addition to the data collected and their psychometric properties. Specifically, some instruments retrieve dry eye symptomology and others take into consideration additional measures, including risk factors and HRQL.[7]

The Ocular Surface Disease Index© (OSDI) (Allergan plc, Irvine, CA) is a validated questionnaire frequently used in clinical settings in addition to the research environment.[7,8] The questionnaire includes relatively few questions and is more easily applied than many longer, more complex questionnaires that are available.[7,8] The OSDI questionnaire has been shown to be a valid and reliable instrument in the assessment of dry eye severity.[8] This 12-item questionnaire provides a rapid assessment of symptoms and HRQL and the questions are subdivided into three separate groups: ocular symptoms, vision-related functions and environmental factors. Patients are asked to recall the frequency of specific ocular symptoms and scenarios experienced ''in the past week'' along a five level Likert-type scale: ''All of the time'', ''Most of the time'', ''Half of the time'', ''Some of the time'' and ''None of the time''. An option of ''Not applicable'' is available for patients who did not perform the activities or experience any of the vision related functions and environmental conditions outlined in the questionnaire. The composite score ranges from 0 to 100, with higher scores representing greater severity.

The OSDI questionnaire was developed using several information sources, ranging from patient comments compiled during clinical studies to analyzing quality-of-life instruments.[8] The initial item list was distributed to over 400 patients with DES to establish the frequency of symptoms or lifestyle restrictions experienced, in addition to using patient focus groups and clinician interviews. The preliminary 40-item OSDI questionnaire was reduced to the existing 12-item questionnaire after psychometric analysis examining the validity and reliability from two groups of patients with dry eye in a clinical trial.[8]

Several steps of cognitive processing are utilized during the completion of questionnaires, including an

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