

00303 Standard Patient Evaluation of Eye Dryness as Symptom Assessment

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Aims: Dry eye disease (DED) is a common disease in Singapore with a huge healthcare burden. However, there is no universally accepted way to record patient reported outcomes. This study evaluates the scores of one questionnaire- the Standard Patient Evaluation of Eye Dryness (SPEED) from subjects in Singapore, and compare it with scores obtained from studies overseas. We discuss the potential use of SPEED as a tool for long-term monitoring of DED symptoms in patients.

Methodology: A total of 288 subjects were enrolled across three separate local studies involving different patients with dry eye disease. The SPEED questionnaire was administered by study personnel. The frequency distribution and central tendencies of SPEED scores from each of the three studies were analysed and compared to previously reported SPEED scores conducted overseas.

Result: The SPEED scores obtained in Singapore followed a normal distribution ($P < 0.05$), both when analysed individually and collectively. Similar SPEED scores were observed across the 3 local studies, with no statistically significant variation (means and SD were 11.6 ± 4.6 , 11.7 ± 5.6 , and 10.9 ± 7.2). The lower 95% confidence limit of the SPEED for the three studies were 10.3, 10.5 and 8.6 respectively. However, the SPEED scores were significantly lower than those reported in the referenced overseas studies, which might have arisen due to differences in methods of identifying symptomatic subjects and/or real differences between characteristics of patients locally and overseas.

Conclusion: The consistency in distribution of scores across separate studies highlights the potential of SPEED to detect and monitor DED. There is possibility for SPEED to be automated and self-administered by patients. This is useful as patients do not need to come to hospitals frequently, and a record of their symptoms based on SPEED is more reliable than subjective recall of symptoms over long intervals.