

## **REPEATABILITY AND REPRODUCIBILITY OF THE SCHIRMER TEST WITHOUT ANESTHESIA IN DRY EYE: OPEN VERSUS CLOSED EYE**

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**Purpose:** To compare the repeatability and reproducibility of the Schirmer test (ST) when the eyes are open (ST<sub>o</sub>) and closed (ST<sub>c</sub>) in patients with dry eye. **Methods:** In a comparative, observational case series study, 31 patients were included in the study. ST<sub>o</sub> and ST<sub>c</sub> without anesthesia were alternately applied with 15 minutes intervals for a total of 6 times on 62 eyes of 31 patients with dry eye. The ST without anesthesia was applied 2 times with the eyes open (S<sub>1</sub>) and closed (S<sub>2</sub>) respectively by one ophthalmologist. Then, the schirmer test was repeated four times with the eyes open (S<sub>3</sub>, S<sub>5</sub>) and closed (S<sub>4</sub>, S<sub>6</sub>) respectively by one nurse using Whatman No. 41 (5x60 mm) with bended end of the paper inserted into the lateral side of the lower conjunctival fornix. **Results:** S<sub>1</sub>, S<sub>3</sub> and S<sub>5</sub> were 23.4, 23.7, 23.3, respectively. S<sub>2</sub>, S<sub>4</sub> and S<sub>6</sub> were 14.7, 15.6 and 16.6, respectively. ST<sub>c</sub> scores were found to be statistically lower than the ST<sub>o</sub> scores in general. There were no statistically significant difference between S<sub>1</sub>, S<sub>3</sub> and S<sub>5</sub>. There were no statistically significant difference between S<sub>2</sub>, S<sub>4</sub> and S<sub>6</sub>. **Conclusions:** Our study suggests that administering the ST with the patient's eyes closed produces lower results and similar repeatability and reproducibility with ST<sub>o</sub> in dry eye patients. Because of the schirmer test performed with closed eyes were lower, it would seem that it provide more reliable results than when eyes are open.