

# Prevalence of Ocular Surface Disease in Primary Open Angle Glaucoma Patients in Songklanagarind Hospital

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**Objective:** To determine the prevalence of ocular surface disease (OSD) in POAG patients in Songklanagarind Hospital.

**Methods:** This prospective cross-sectional study enrolled patients who were 18 years of age or older with primary open angle glaucoma. After thorough eye examination, each patient completed an Ocular Surface Disease Index (OSDI) questionnaire and was evaluated with Schirmer's test, fluorescein staining and tear break up time for evaluation of ocular surface diseases (OSD).

**Results:** Ninety POAG patients were recruited. 49 (54.4%) patients were male. The mean age of the participants was 67.13 ( $\pm 10.75$ ) years. 56 (62.2%) patients had one of OSD symptoms by OSDI questionnaire. There were 46 (51.67%) patients had abnormal Schirmer's test. Positive corneal fluorescein staining was found in 50 (55.55%) patients and abnormal tear break-up time presented in 64 (71.11%) patients. Female patients had more OSD symptoms by OSDI questionnaire compared to male patients (odds ratio =4.66; 95% CI :1.80, 12.11). Patients who were diagnosed POAG more than 4 years, used more than one antiglaucoma drug, antiglaucoma usage more than 2 years and age  $\geq 60$  years old had abnormal test result in all OSD tests.

**Conclusions:** More than half of POAG patients in Songklanagarind Hospital had sign and/or symptoms of OSD by OSD tests and OSDI questionnaire. Gender, age, number of antiglaucoma drugs, duration of using antiglaucoma drug had significant effect on prevalence of OSD signs and symptoms.