Abstract ID: 54 Clinical Medicine Oral

THE VALUE OF AQUEOUS ASSESSMENT IN DIAGNOSING DRY EYE

Mohd Hafidz Ithnin[1], Azrin Esmady Ariffin[2] and Khairidzan Mohd Kamal[3]

[1]Department of Optometry and Visual Science, Kulliyyah of Allied Health Sciences, International Islamic University Malaysia, Pahang, Malaysia, [2]Faculty of Optometry and Visual Science, Segi University, Selangor, Malaysia, [3]Department of Ophthalmology, Kulliyyah of Medicine, International Islamic University Malaysia, Pahang, Malaysia.

Presenter: Mohd Hafidz Ithnin, mohdhafidz_ithnin@iium.edu.my

Introduction: The clinical evaluation of the three layers of tear film is still poorly described. The purpose of this study is to evaluate the value of aqueous assessment in diagnosing dry eye.

Materials and method: Schirmer test with anaesthesia (STA) and tear meniscus height (TMH) measurement were conducted on non-dry eye (NDE) and dry eye (DE) subjects in this cross-sectional study. The NDE and DE subjects were classified using two types of classification; classification 1 and classification 2.

Results: 321 subjects with 642 eyes were recruited in the study. STA was significantly correlated with TMH ($r = 0.24$, $p < 0.001$) in all 642 eyes. The comparison between non-dry and dry eye subjects in STA and TMH were not significantly different ($p > 0.05$) if the Classification 1 was used to define dry eye. In Classification 2, there were significantly different between NDE (12.5 ± 8.2 mm) and DE (3.4 ± 0.8 mm) subjects in STA ($p < 0.001$). Similar trend was also depicted in TMH based on the definition of dry eye stated in Classification 2 (NDE = 0.45 ± 0.20 mm, DE = 0.39 ± 0.14 mm; $p < 0.05$).

Conclusion: The value of STA and TMH were lower significantly in dry eye subjects. However, the significant outcomes were only demonstrated if the clinical signs of dryness were used in the definition of dry eye.