Malaysian Society of Pharmacology & Physiology (MSPP)
34th Scientific Meeting 2021
MALAYSIAN SOCIETY OF PHARMACOLOGY & PHYSIOLOGY (MSPP) - 34TH SCIENTIFIC MEETING 2021

ISBN: 978-2-88971-008-9
DOI: 10.3389/978-2-88971-008-9

July 15–17, 2021, Virtual Meeting

The abstracts in this collection have not been subject to any Frontiers peer review or checks, and are not endorsed by Frontiers. They are made available through the Frontiers publishing platform as a service to conference organizers and presenters. The copyright in the individual abstracts is owned by the author of each abstract or his/her employer unless otherwise stated. Each abstract, as well as the collection of abstracts, are published under a Creative Commons CC-BY 4.0 (attribution) licence (https://creativecommons.org/licenses/by/4.0/) and may thus be reproduced, translated, adapted and be the subject of derivative works provided the authors and Frontiers are attributed.

For Frontiers’ terms and conditions please see https://www.frontiersin.org/legal/terms-and-conditions.

115 Padmavathy Kathamuthu Masilamani, Rohith Sharan Sankaran: Correlation of height and BMI with motor nerve conduction parameters in both arms of young adults

116 Khin Cho Aung, Muhammad Hamdi Mahmood, Mar Mar Lwin, Khin Than Yee, Mira Khairunnisa Kamil, Rachel Meni Muyang, Hamsaa Varrthini Mohana Kumar: Comparison of computer-based Ishihara test versus online D-15 dichotomous test in colour vision screening

117 Siti Balqis Adnan, Muhammad Hassan, Marina Yusoff, Nordin Simbak, Atif Amin Baig: Systematic review of pneumococcal infection, diagnosis, and treatment in Malaysia

119 Sohaib Ashraf, Muhammad Ahmad Imran, Larab Kalsoon, Rutaba Akmal, Iqra Farooq, Muhammad Ghufran, Muhammad Kiwan Akram, Shoaib Ashraf: Knowledge, attitude, and practice of clinicians about antimicrobial stewardship and resistance among hospitals of Pakistan: A multicenter cross-sectional study

121 Nuraina Fatiha Mezlan, Wan Hafizah W Jusof: Internet gaming disorder: Prevalence and effects on insomnia and psychological distress among young adult gamers in Malaysia

122 Chitra Govindaraja: Model making: Unveiling the art in medicine
PMECP-07

Comparison of computer-based Ishihara test versus online D-15 dichotomous test in colour vision screening

Khin Cho Aung1*, Muhammad Hamdi Mahmood2, Mar Mar Lwin1, Khin Than Yee2, Mira Khairunnisa Kamil3, Rachel Meni Muyang3, Hamsaa Varrthini Mohana Kumar3

1Department of Basic Medical Science, Faculty of Medicine and Health Science (FMHS), University Malaysia Sarawak (UNIMAS), Sarawak, Malaysia
2Department of Para-Clinical Sciences, Faculty of Medicine and Health Science (FMHS), University Malaysia Sarawak (UNIMAS), Sarawak, Malaysia
3Preclinical students in Medical Program, Faculty of Medicine and Health Science (FMHS), University Malaysia Sarawak (UNIMAS), Sarawak, Malaysia

*ca_khin@unimas.my

Most online colour vision tests have varying degrees of quality and are variations of classical Ishihara test. The choice of test depends on multiple factors, including the reason for assessment of the persons, however, it is necessary to choose quick and accurate screening test in clinical practice. Objective of this study is to compare the computer-based Ishihara test and online D-15 dichotomous test in colour vision screening. A total of 302 medical and nursing students aged between 17-25 years were screened by these two tests in a computer lab in University Malaysia Sarawak. The results showed 295 (97.7%) normal and 7 (2.3%) defects in Ishihara test; while 292 (96.7%) normal and 10 (3.3%) defects in the online dichotomous test. Of 70 males and 232 females, 7 (10.0%) males in the Ishihara test, 8 (11.4%) males, and 2 (0.9%) females in the online test were found to have defects. There was strong agreement between results of two tests (Kappa:0.82). In this study, Ishihara test screens the colour vision and dichotomous test shows the type and severity of the vision defect, which mainly occurs in male. This present study concludes that a standardised online colour vision test is equally comparable to the traditional Ishihara test, thus providing an alternate robust option for colour vision screening in healthcare practice. Nevertheless, any person identified as colour vision deficient by online screening tools will require to further consult with an eye care professional.

Keywords: Colour vision, Accurate & robust, Screening test, Computer-based Ishihara test, Online D-15 dichotomous test