

4th Global Summit on

Healthcare

November 09-10, 2015 Dubai, UAE

Comparison of three methods of tonometry in normal subjects vs. glaucoma patients: Goldmann-applanation, non-contact air puff and Tono-Pen XL, in a University Hospital in Riyadh, Saudi Arabia

Abdul Rahman Al-Jasser, Essam A Osman, Mohammed Al Maady and Ahmed Mousa
King Saud University, Saudi Arabia

Purpose: To assess and compare measuring outcomes of intraocular pressure (IOP) through three different tonometers: the Goldmann-applanation tonometer (GAT), the Tono-Pen XL (TPXL) and a non-contact Airpuff tonometer (NCT) between glaucoma patients and normal subjects.

Methods: A cross-sectional study that comprises a sample of 130 eyes of 65 glaucoma patients (cases) and 92 eyes of 46 normal persons that served as (controls). Three different physicians measured the IOP via GAT, NCT and TPXL for the same subjects. Measurements via the three devices were statistically compared.

Results: In the glaucoma group, the mean IOP measured by the GAT was 16.0 (5.5), range [6-40] while it was 20.5 (6.9), range [10-52] using the TPXL and 20.2 (6.5), range [8-50] using the NCT. Among the control group, the mean IOP was 14.0 (2.7), range [9-19] using the GAT, 17.3 (3.8), range [6-30] using the TPXL and 17.9 (3.9), range [10-27] using the NCT.

Conclusion: There is agreement between the three devices with relatively higher reading in both NCT and TPXL. All methods are still needed to overcome the variation of assessment circumstances and purposes.

dr.a.aljasser@gmail.com

Rheological effect of moderate red wine consumption in hyper-cholesterolemic induced rats

Anslem O Ajugwo¹, Teddy C Adias² and Tosan A Erhabor³

¹Madonna University, Nigeria

²Bayelsa State College of Health Technology, Nigeria

³Medical Laboratory Science Council of Nigeria, Nigeria

Consumption of wine dates back to the ancient time. It is an alcoholic beverage made from fermented grapes or other fruits. Wine has been variously used as form of medication, as digestive aid and as antiseptic in cleaning wounds. The effect of its consumption is determined in hypercholesterolemic state using albino Wistar rats. The rats were divided into 4 groups and administered with 0.5 ml of wine, 0.25 ml of wine, 0.5 ml of distilled water respectively while the last group served as control. Blood samples were collected using ocular puncture. Significant difference ($p < 0.05$) was seen in plasma viscosity (PV). No significant difference ($p > 0.05$) was seen in other parameters including whole blood viscosity (WBV), packed cell volume (PCV), erythrocyte sedimentation rate (ESR), Total cholesterol (TC), high density lipid (HDL) and low density lipid (LDL). Moderate red wine consumption has rheological effect which could be beneficial though a further study is advised.

slemjugwo@yahoo.com