

Evaluation of spontaneous retinal venous pulsation in primary open-angle and primary angle-closure glaucoma patients

ABSTRACT

Introduction:

Spontaneous retinal venous pulsation (SRVP) is a rhythmic variation in the calibre of one or more retinal veins. The incidence of SRVP was reduced in glaucoma patients. It was also reduced in people with raised intracranial pressure compared to a healthy population.

Purpose:

The main objective was to report the frequency and rate of SRVP in primary open-angle glaucoma (POAG) and primary angle-closure glaucoma (PACG) patients and to associate these with the severity of glaucoma in Malay patients.

Design of study:

A comparative cross-sectional study.

Materials and methods:

A comparative cross-sectional study involving primary glaucoma patients attending the eye clinic at Hospital Universiti Sains Malaysia (HUSM), Kelantan, Malaysia, was performed between December 2015 and June 2017. The main outcomes measured were the presence and rate of SRVP using a confocal scanning laser ophthalmoscope (Spectralis High-Resolution Optical Coherence Tomography Angiography, Heidelberg Engineering GmbH, Heidelberg, Germany). In the presence of SRVP, the rate of SRVP in one minute was counted manually based on the real-time fundus movie recorded using the confocal scanning laser ophthalmoscope.