

## عنوان مقاله:

Correlation of Optic Disc Morphometry and Disc Microvasculature Assessed with Optical Coherence Tomography Angiography

## محل انتشار:

هشتمین همایش تحقیقات چشم پزشکی و علوم بینایی ایران (سال: 1397)

تعداد صفحات اصل مقاله: 1

## نویسندگان:

Khalil Ghasemi Falavarjani - Eye Research Center and Department of Ophthalmology, Rassoul Akram Hospital, Iran University of Medical Sciences

Hamideh Shenazandi - Eye Research Center and Department of Ophthalmology, Rassoul Akram Hospital, Iran University of Medical Sciences

Dariush Naseri - Eye Research Center and Department of Ophthalmology, Rassoul Akram Hospital, Iran University of Medical Sciences

Pasha Anvari - Eye Research Center and Department of Ophthalmology, Rassoul Akram Hospital, Iran University of Medical Sciences

## خلاصه مقاله:

**Purpose:** To evaluate correlations of the optic disc microvasculature measurements to the disc morphometrics in normal eyes **Methods:** In this prospective, observational, case-series, enface 4.5x4.5 mm optical coherence tomography angiography (OCTA) images were obtained from the optic disc of healthy individuals. The radial peripapillary capillary (RPC) and the nerve head (NH) en face images were obtained. Also, spectral domain OCT measurements of the peripapillary nerve fiber layer (NFL) thickness were recorded. Correlation of the vessel density and NFL measurements with the optic disc morphometrics was analyzed. **Results:** Fifty-eight eyes of 58 patients were included. Mean peripapillary NFL thickness was  $99.77 \pm 8.47 \mu\text{m}$ . The mean disc area was  $2.15 \pm 0.34 \text{ mm}^2$  (range 1.48-3.01  $\text{mm}^2$ ) with an average cup/disc area ratio of  $0.27 \pm 0.14$  (range 0.0 to 0.6). On the RPC en face image, the mean vessel density of the whole image, peripapillary and inside disc was  $55.52 \pm 2.90$ ,  $62.42 \pm 3.30$ , and  $45.77 \pm 9.24$  %, respectively. On the NH en face images, the mean vessel density of the whole image, peripapillary and inside disc was  $55.69 \pm 3.04$ ,  $60.15 \pm 2.79$ , and  $52.69 \pm 5.31$  %, respectively. The NH vessel density in the inside disc area correlated with the cup/disc area ratio ( $R = -0.44$ ,  $P < 0.001$ ). The association of RPC vessel density in the inside disc area with the cup/disc area ratio was significant ( $R = -0.87$ ,  $P < 0.001$ ). The RPC vessel density in the peripapillary area correlated with the cup/disc area ratio ( $R = 0.37$ ,  $P = 0.04$ ). Also, The RPC vessel density in the whole image was associated with the peripapillary NFL thickness ( $R = 0.32$ ,  $P = 0.01$ ). **Conclusion:** We observed a significant negative correlation between inside disc vessel density and cup/disc area ratio, but not to the disc area in normal eyes. In addition, the whole image RPC vessel density was revealed to be correlated weakly with the average RNFL thickness

## کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

