

## Abstract 59

### SMALL-SIZED DISCS AND OCT NORMATIVE DATABASES IN CHILDREN

Oral

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#### **Purpose:**

To compare the parameters of the optic nerve head (ONH) and inner retinal layers thickness between children and adults with small-sized discs (SSD) and normal-sized discs (NSD) using optical coherence tomography (OCT).

#### **Methods:**

Case-control study that included 172 eyes. Four groups of patients were created: Forty-one children with SSD (disc size between 1.42 and 1.60 mm<sup>2</sup>), 41 adults with SSD, 45 children with NSD (disc size between 1.80 and 2.20 mm<sup>2</sup>) and 45 adults with NSD.

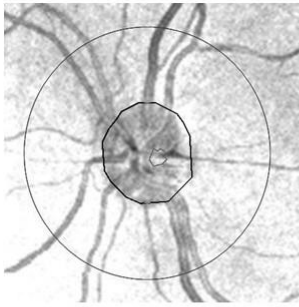
All subjects were imaged with spectral domain OCT. Rim area, cup/disc ratio (CDR) and cup volume, peripapillary retinal nerve fiber layer (pRNFL) thickness and ganglion cell-inner plexiform layer (GCIPL) thickness were obtained.

#### **Results:**

There were no differences in CDR, cup volume, pRNFL and GCIPL thicknesses between children and adults with SSD, except for the rim area and nasal pRNFL thickness ( $p=0.009$  and  $0.010$ , respectively). There was a statistical difference in all the parameters between children and adults with NSD, except for the GCIPL thickness.

#### **Conclusions:**

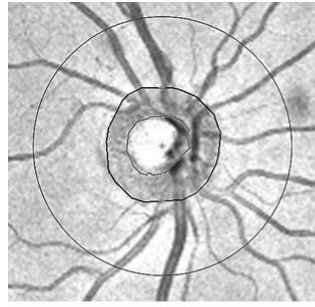
SSD belonging to children do not have significant differences in ONH parameters and thickness pRNFL and GCIPL thicknesses comparing with adults. According to this study, the normative databases created for the evaluation of the cup volume and CDR in adults can be used in children with SSD.



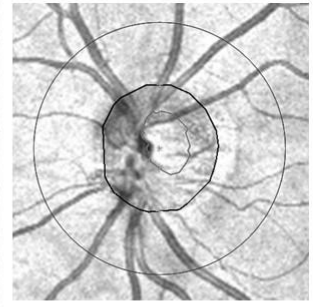
Child SSD 1.39



Child SSD 1.48



Child NSD 1.91



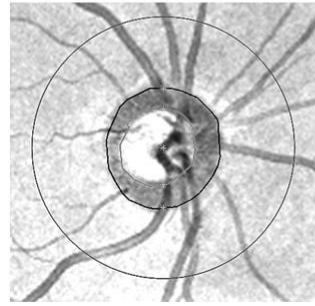
Child NSD 2.28



Adult SSD 1.39



Adult SSD 1.48



Adult NSD 1.91



Adult NSD 2.28