

Author(s)**Principal :**

Tetsuya Yamamoto, M.D. **Presenting :** Tetsuya Yamamoto, M.D.

Contributing :

Tetsuya Yamamoto, M.D. Miho Sato, M.D. Hideya Uchida, M.D.

Abstract Information**Abstract Title :**

HRT findings of superior segmental optic hypoplasia for differentiating glaucoma

Purpose :

Superior segmental optic hypoplasia (SSOH) is a congenital anomaly affecting the optic nerve head and the retina. Because thinning of the neuroretinal rim of the optic nerve head occurs in SSOH, predominantly in the nasal superior region, differentiation of this condition from glaucomatous optic neuropathy is of clinical importance. In a population study conducted by one of us found the prevalence of SSOH is 0.3%. The purpose of this study is to know the morphometric characteristics of optic nerve head of this condition using the Heidelberg Retina Tomograph (HRT) and thus the efficacy of using HRT as a tool to differentiate SSOH from glaucomatous optic neuropathy.

Design :

Case series, prospectively enrolled in the study

Participants :

Twenty-two consecutive SSOH cases diagnosed in our clinic. One eye was randomly selected for the study when both eyes were affected. The age ranged 9 to 62 years and averaged 29.7 years. Fifteen were bilateral cases and 7 unilateral.

Main Outcome Measures :

HRT parameters

Methods :

The HRT parameters per quadrant were obtained and compared among the quadrants.

Results :

We found significant HRT parameter changes characteristic of this disorder such as larger Cup Area, larger Cup Volume in the nasal superior quadrant as compared to the nasal inferior.

Conclusion :

HRT findings are different between SSOH and glaucoma, and hence may be used for the differential diagnosis.