

Central choroidal thickness in children and adolescents: An eye on future vision health.

Talha Ayyildiz*

Department of Ophthalmology, Bursa City Hospital, Bursa, Turkey

Introduction

The ocular health of children and adolescents is a topic of paramount importance, as visual acuity plays a fundamental role in their overall development and quality of life. Among the various aspects of eye health, central choroidal thickness (CCT) has gained prominence as a crucial parameter for understanding and assessing ocular health. CCT, which represents the thickness of the choroid, a vascular layer of the eye, is a significant indicator in diagnosing and managing various eye conditions. In this article, we will explore the relevance of central choroidal thickness in children and adolescents and its implications for their visual well-being [1].

The choroid, a thin, highly vascularized layer situated between the retina and the sclera, plays a vital role in maintaining the health of the eye. Among its functions are providing nourishment to the retina and regulating intraocular pressure. Central choroidal thickness, which refers to the thickness of the choroid at the macular region, is a valuable clinical measurement that can reveal important insights into ocular health. In recent years, advances in imaging technology, particularly optical coherence tomography (OCT), have enabled precise and non-invasive measurement of CCT. This innovation has paved the way for in-depth studies in children and adolescents, shedding light on the potential impact of CCT on their vision [2].

Understanding CCT in children and adolescents is crucial because deviations from the normal range can be indicative of various ocular conditions. Abnormalities in CCT may suggest the presence of diseases such as myopia, hyperopia, or even conditions like central serous chorioretinopathy. These conditions can have a profound impact on a child's vision and may require early intervention to prevent further complications [3].

One area where CCT has gained particular attention is in the management of myopia, or nearsightedness, which has seen a significant rise among children and adolescents in recent years. Studies have shown a correlation between thinner choroids and the development and progression of myopia. A thinner choroid may indicate an increased risk of myopia, making CCT a valuable tool for assessing and monitoring myopia in this age group. Additionally, CCT measurements can aid in predicting the response to various treatment modalities, such as orthokeratology or atropine therapy, commonly used to manage myopia in children. This personalized approach to

treatment can lead to more effective outcomes and better long-term visual health [4].

The implications of CCT measurements in pediatric ophthalmology are profound. They offer early detection and monitoring of conditions like myopia, enabling timely interventions that can potentially prevent vision impairment in the long run. Moreover, understanding CCT can lead to more personalized treatment approaches, ensuring that children and adolescents receive the most effective care for their unique eye health needs. As research in this field continues to evolve, we can look forward to improved diagnostic and therapeutic strategies that will enhance the visual well-being of the younger generation. By recognizing the significance of central choroidal thickness in children and adolescents, we take a significant step toward preserving and protecting their precious gift of sight [5].

Conclusion

Central choroidal thickness has emerged as a critical parameter in assessing the ocular health of children and adolescents. With the advent of advanced imaging technology, we can now obtain precise measurements and valuable insights into the thickness of the choroid at the macular region, allowing us to better understand and manage various eye conditions

References

1. Polat S, Gediz BS, Ercan AC, et al. The place of optical coherence tomography in patients with obsessive compulsive disorder. *Eurasian J Med.* 2019;51(3):237.
2. Huang D, Swanson EA, Lin CP, et al. Optical coherence tomography. *Science.* 1991;254(5035):1178-81.
3. Bazzazi N, Ahmadpanah M, Akbarzadeh S, et al. In patients suffering from idiopathic central serous chorioretinopathy, anxiety scores are higher than in healthy controls, but do not vary according to sex or repeated central serous chorioretinopathy. *Neuropsychiatr Dis Treat.* 2015;1131-6.
4. Lee JW, Song IS, Lee JH, et al. Macular choroidal thickness and volume measured by swept-source optical coherence tomography in healthy Korean children. *Korean J Ophthalmol.* 2016;30(1):32-9.
5. Wang S, Wang Y, Gao X, et al. Choroidal thickness and high myopia: a cross-sectional study and meta-analysis. *BMC ophthalmol.* 2015;15(1):1-0.

*Correspondence to: Talha Ayyildiz, Department of Ophthalmology, Bursa City Hospital, Bursa, Turkey, E-mail: ayyiltalha@hotmail.com

Received: 27-Sept-2023, Manuscript No. AAJCAH-23-115976; Editor assigned: 01-Oct-2023, Pre QC No. AAJCAH-23-115976(PQ); Reviewed: 15-Oct-2023, QC No. AAJCAH-23-115976; Revised: 22-Oct-2023, Manuscript No. AAJCAH-23-115976(R); Published: 29-Oct-2023, DOI: 10.35841/ajcah-7.5.167