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Short term ocular effects among swimmers: (A scoping review)

Anvitha Shetty

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Abstract:

Aim: to map and summarize the existing evidence explaining the short-term ocular manifestation among swimmers.

Method: Following the PRISMA-Scr guidelines, the articles established between 1950-and 2022 were identified from different databases such as Acute PubMed, Scopus, OVIDsp, and Cochrane using specific keywords based on the parameters selected for the review.

Results: Acute change in corneal thickness thinning (~55 m) after swimming goggle wear, decreased anterior chamber angle (narrowing of the angle of ~3 degrees), anterior chamber volume, and anterior chamber depth after the swimming goggles wear addition to this the tear film quality, stability deteriorated with ocular surface disruption. But the dry eye symptoms reduce with swimming goggles wear.

Conclusion: ocular parameters like central corneal thinning after SG wear, Anterior chamber angle was decreased, Tear film stability, and quality immediately returns to baseline value immediately after swimming goggles removal. But no change in vision is seen.

Keywords: swimming goggle, swimmers, swim, swimming, central corneal thickness, anterior chamber angle, tear film quality, stability, and dry eye.

