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Biography

Sadia Saddiqi, is a Lecturer in the Department of Optometry and Vision Sciences at the University of Lahore, with over six years of experience in clinical practice and academia. Her expertise includes contact lenses, anterior segment care, diagnostic imaging, pediatric optometry, and myopia management. She previously served as Head of the Diagnostic Department at Jannat Aziz Trust Eye Hospital, leading advanced ocular diagnostic services. Ms. Saddiqi holds an M.Phil. in Optometry and a Doctor of Optometry degree, and is actively involved in research, student mentorship, and professional development through national and international organizations.

Effect of Soft Contact Lens Wear on Tear Film Stability in Myopes

Abstract:

Methods: Myopic participants with no prior experience wearing contact lenses were chosen, and were split into two equal groups based on the type of lens: soft hydrogel; and silicone hydrogel. Patients with dry eye, other refractive errors, or using systemic medications were excluded from the study. Tear film stability was evaluated with Tear Break-Up Time (TBUT) test, conducted before and after one month of lens wear. Data analysis was performed using SPSS, Version 27. A p-value < 0.05 was considered statistically significant.

Results: The study enrolled 90 myopic patients. For TBUT, soft hydrogel lenses showed a minor but significant reduction from 11.99s to 11.88s (Mean difference = -0.11s, $p < 0.050$), while silicone hydrogel lenses exhibited a significant improvement from 11.71s to 13.28s (Mean difference = +1.57s, $p < 0.001$). Independent t-test comparison revealed that silicone hydrogel lenses had significantly greater positive changes in TBUT compared to soft hydrogels, indicating improved tear film stability after one month of lens wear.

Conclusion: This study shows that wearing soft contact lenses impacts tear film stability in myopic patients, however a positive or negative response depends on type of lens material worn.