Binocular and Digital Vision Therapies for Amblyopia 1.Clinical Implications Binocular and digital therapies represent a promising advancement in amblyopia management by directly targeting the binocular nature of the disorder.Digital platforms such as video games, movies, or virtual reality systems exploit neuroplasticity by repeatedly stimulating binocular combination and promoting functional reorganization in the primary visual cortex (V1) and higher visual areas.o Randomized controlled trials have shown that dichoptic digital treatments can significantly improve amblyopic eye visual acuity compared to optical correction alone.In contrast, binocular and digital therapies aim to reduce cortical suppression by rebalancing visual input between the two eyes.This contrast balancing forces the visual cortex to integrate input from both eyes, thereby reducing suppression of the amblyopic eye.Some large trials (e.g., home-based binocular video game studies) did not demonstrate superiority over conventional treatments or placebo interventions.?2.?3.2.3.4.5.?4.

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