

Myopia

Uffaq Afza

1st Year MBBS, Islamabad Medical and Dental College, Islamabad Pakistan

Key points

- What is myopia?
- What are causes of myopia?
- Treatment of myopia

Short-sightedness and myopia are other names for nearsightedness, an eye condition where light concentrates in front of the retina rather than on it. As a result, local items appear normal and distant objects appear hazy.¹

Causes

It is thought that a mix of genetic and environmental factors is the underlying reason. Work that requires close attention to small objects, spending more time indoors, urbanization, and a family history of the illness are all risk factors. It is also linked to having a high social status and more education.²

Signs and Symptoms

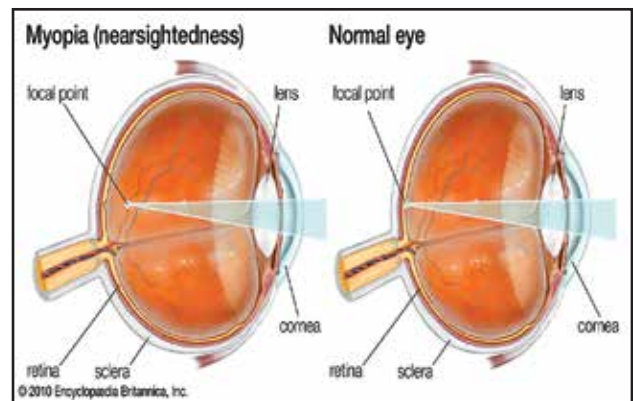
A person with nearsightedness may see properly up to the far point of the eye, but anything beyond this distance seems blurry. Even standard reading distances may be impacted if the myopia is severe enough. The majority of myopic eyes look fundamentally comparable to nonmyopic eyes during standard eye exams.³

Genetics

Myopia risk may be passed down from one's parents. There are 18 potential myopia-related loci on 15 different chromosomes, according to genetic linkage studies, but none of these loci is connected to the candidate genes for myopia. Myopia may not be caused by a single gene, but rather by a complicated network of numerous altered proteins working together. Defects in the regulation of these structural proteins may actually induce myopia rather than errors in structural proteins themselves.⁴

Treatment

The most frequent form of treatment is vision correction with glasses or contact lenses; alternative options include orthokeratology and refractive surgery.⁵



<https://www.britannica.com/science/myopia>

References

1. "Facts About Refractive Errors". NEI. October 2010. Archived from the original on 28 July 2016. Retrieved 30 July 2016.
2. Shapira Y, Mimouni M, Machluf Y, Chaiter Y, Saab H, Mezer E (December 2019). "The Increasing Burden of Myopia in Israel among Young Adults over a Generation: Analysis of Predisposing Factors". *Ophthalmology*. 126 (12): 1617–1626.
3. Shapira Y, Mimouni M, Machluf Y, Chaiter Y, Saab H, Mezer E (December 2019). "The Increasing Burden of Myopia in Israel among Young Adults over a Generation: Analysis of Predisposing Factors". *Ophthalmology*. 126 (12): 1617–1626.