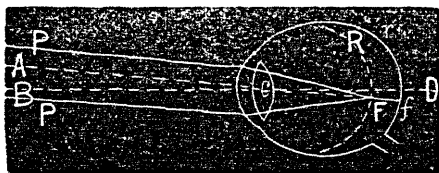


between Convergent Strabismus and Hypermetropia. Convergent Strabismus arises from Hypermetropia, on account of the great efforts of accommodation which the optical defect renders necessary. When Diverging Strabismus arises from Myopia, however, the excessive refraction of the eye is not without its direct influence, but the chief cause of the deviation depends on the distension and change of form of the globe. It is now normally admitted that in the great majority of cases of Myopia, the cornea and crystalline lens have a normal degree of curvature, and that the defect depends altogether upon a lengthening of the antero-posterior diameter of the eye; the globe having a tendency to take the form of an ellipsoid instead of a sphere.



Thus, in Fig 3, let E represent a section of a myopic eye; R F will represent the position of the retina in the normal eye upon which parallel rays are brought to a focus. The distance between the F and S will represent the amount of abnormal lengthening of the antero-posterior diameter of the eye.

This lengthening of the antero-posterior diameter interfere with the mobility of the eye in a general way; but more especially on account of its filling up, more completely, the socket,—this latter being a cavity of somewhat the same shape. The ellipsoidal form of the eye in myopia affects its movements inwards as well as outwards. Out of seventeen cases of myopia examined by Donders, nine could not move their eyes through a range of more than about 50 degrees, whereas, the normal eye has usually a range of about 120 degrees. Diminished motion of the eyes outwards is little more than an inconvenience simply necessitating considerable turning of the head, but insufficiency of motion inwards is attended by more important consequences, which we will proceed to consider.

Most persons with normal vision are able to converge their eyes simultaneously upon an object that is brought as near as two inches from the root of the nose. In high degrees of myopia, however, the eyes cannot be converged to a near distance, for two reasons; in the first place, free motion of the eyes inwards is diminished by the ellipsoidal shape of the ball; but in the second place, in high degrees of myopia, there is displacement of the yellow spot of the retina *inwards*; in consequence of