The prevalence of myopia has increased worldwide in recent decades. In East Asia's metropolises ≥ 80% of young adults are affected. This dramatic increase is mainly caused by changes in lifestyle and behaviour. Atropine has been used for more than 100 years to arrest myopia progression. It has become an evidence-based treatment regimen in the last decade, although the exact mechanism of the effect of treatment is still unknown. Atropine eye drops can slow myopia progression by an average of - 0.54 dioptres (D)/year in Asian children and - 0.35 D/year in Caucasian children. However, a non-response rate of about 10% has been found. Treatment should be established in schoolchildren only (age ≥ 6 years) with myopia ≤ - 2 D (spherical equivalent, cycloplegic refraction) and with documented myopic progression of - 0.5 D in the preceding year. 0.01% eyedrops should be instilled into the lower fornix at bedtime. Atropine 0.01% therapy is well tolerated. Atropine is usually administered for 2 years since efficacy is somewhat better in the second year. During treatment, a 6-month follow-up with cycloplegic refraction and axial length measurement is recommended. After the 2-year period, atropine withdrawal is justified if progression is less than - 0.25 D/year in the second year. Even after atropine has been stopped, follow-up examinations are needed to detect any rebound. Atropine-therapy is resumed if progression is again higher than - 0.5 D/year. Topical atropine is used off-label.