Recent Updates on Vision and Falls

Patients at risk of falls, who are active and long-term multifocal wearers, should be advised to wear single vision distance spectacles outdoors. However, some resist this advice because of their preference for the convenience of multifocals. A lab-based study (Elliott et al., 2016) has indicated that intermediate addition (~+1.25DS) varifocals and bifocals produce safer gait (there is minimal blur of steps and stairs and other obstacles in the travel path, less image jump with bifocals and less peripheral distortion with varifocals) and yet can provide adequate spot reading (N6) for price tags, phones, menus etc. and will be preferred by some patients to wearing single vision distance spectacles.

Elliott DB, Hotchkiss J, Scally AJ, Foster R, Buckley JG. Intermediate addition multifocals provide safe stair ambulation with adequate 'short-term' reading. *Ophthalmic Physiol Opt*. 2016; 36(1):60-68.

Recent studies have highlighted that cataract surgery can improve falls rates, but that the beneficial aspects of cataract surgery (improvement in visual impairment) can be offset by large changes in refractive correction (Palagyi et al, 2017; Keay & Palagyi, 2018).
This provides more evidence that a myopic patient at high risk of falls would be better having low myopia as their target refractive correction post-surgery, particularly if they were used to reading at times without spectacles before surgery. This would mean that they would be (a) spectacle independent for reading post-surgery (which many prefer) and (b) have a reduced change in refractive correction due to surgery, so reducing the risk of falls.

Palagyi A, Morlet N, McCluskey P, White A, Meuleners L, Ng JQ, et al. Visual and refractive associations with falls after first-eye cataract surgery. *J Cataract Refract Surg*. 2017; 43(10):1313-1321.

Keay L, Palagyi A. Preventing falls in older people with cataract - it is not just about surgery. *Ophthalmic Physiol Opt*. 2018; 38(2):117-118.