Spontaneous late-onset comitant acute non-accommodative esotropia in children

Dear Editor,

We read with interest the article by Kothari, on acute non-accommodative esotropia (ANAET). We appreciate the author’s efforts in attempting to find a simple solution to a complex and often perplexing problem, usually referred to as acute acquired comitant esotropia (AACE) in the literature. On occasions it may be the sole presenting feature of serious neurological disease, creating a serious diagnostic dilemma. We feel it is pertinent to make the following observations on this abstruse entity.

1. Accommodative esotropia can present till the teens and could be refractive, non-refractive, hypo or partially accommodative and coexist in infantile esodeviation, Duane’s, Mobius syndromes and even in intermittent divergent squint. A near distance disparity of less than 10 prism diopeters (PD) only implies normal AC/A ratio, it does not rule out accommodative deviation. It is not known as to how the accommodative component was ruled out, there can be partial response to glasses in AACE even in cases harboring central nervous system (CNS) pathology.

2. The concept of ANAET and its five distinct sub-types seems to be the author’s own and does not seem to serve any purpose. The classification given by Burian and Miller in 1958 enjoys wide acceptance, grouping AACE into three distinct types.

3. Vision records (aided, unaided) and influence of glasses on deviation were not known. Nine patients had refraction in the range of more than 3 diopeters (seven hypermetropes and two myopes) which could fall into accommodative, partially accommodative or Burian Franceschetti and Bielschowsky types of AACE. Anisometropia (one case), decompensated monofixation syndromes, high AC/A ratio and low fusional divergence amplitudes (not evaluated) could have contributed to AACE in others.

4. Amazingly, none complained of diplopia. The high incidence of amblyopia was also intriguing, including 4 grouped as ametropic amblyopia as most have refractive errors (<6PD), more likely to produce an accommodative esodeviation, rather amblyopia. Photographic evidence has its own drawbacks.

5. There is no perspicacity in the literature as to when to neuroimage, as isolated AACE may be the sole presentation of a CNS lesion.

We have seen amongst others, a 12-year-old child harboring diffuse silent intracranial tuberculomas, presenting as AACE in addition to subtle signs of alternating adducting hypertropia and paradoxical asymmetrical intorsion, recovering completely on anti-tubercular treatment. Acute acquired comitant esotropia accompanying neurological disease has underpinnings of a skew deviation, with the horizontal component manifesting as AACE due to anomalies of translational vestibulo-ocular reflex in the fore and aft axis in the surge plane and alternating hypertropia along with abnormal torsion arising out of anomalies in the pitch and roll plane respectively. A head tilt test, evaluation for torsion and alternating hypertropias are mandated in AACE as they may point towards a skew deviation in all its three dimensions due to CNS involvement warranting neuroimaging.

The author’s comments trivializing neuroimaging were misleading as CNS tuberculosis and neuro-cysticercosis, among many other CNS disorders are rampant in our country and may lead to life-threatening diagnostic oversight and also lead to unnecessary strabismus surgery. Acute acquired comitant esotropia is too diverse to be classed as a single entity and such attempts may be fraught with perilous consequences.

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