

Strabismus and Its Management - A Commentary

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ABSTRACT

Purpose: The main purpose of this review is to find and educate oneself about ocular misalignment and its preventive and curable measures of treatment.

Methods: An extensive literature search was conducted in PubMed, google scholar, Cochrane search engines for the articles on strabismus and their new strategies of treatment. As a result, five articles were found to be fit into the criteria. Those articles were gathered and put-up as a commentary.

Results: As a result, we could able to find out the immense need for educating and creating awareness to parents of children who have squint and various ways of treating it.

Conclusions: Educating ourselves as practitioners and patients can help in eradicating the treatable misalignment and that can improve the quality of life mainly among children who are in their early stage. Always informing the parents and educating them helps to reduce further damage to the patient. Mainly in kids who can't even explain their symptoms will be benefitted.

Key words: strabismus, misalignment, psychosocial factors, binocular vision, misalignment

BACKGROUND

Strabismus (squint) is a condition in which the eyes are misaligned. While one eye is directed at an object, the other eye may turn in (esotropia), out (exotropia), up (hypertropia), or down (hypotropia). This misalignment may be persistent or intermittent. New born babies may have evidence of intermittent horizontal

strabismus, which may be normal. Any baby who continues to suffer from strabismus beyond the age of 3 months should be referred to secondary care for further investigations¹. The overwhelming majority of squints in children will be benign and can be referred for further investigation on a routine basis. However, if there are any abnormal signs like leukocoria, limitation in ocular movements, nystagmus then the child should be referred urgently (within a few days) to a hospital eye department (not an optician).

Timely referral and diagnosis is important because strabismus can be a sign of serious pathology, including:

- intracranial pathology, for example, brain tumours; and
 - life- and sight-threatening ocular pathology, for example, retinoblastoma.
- Squints in children, Frequency and direction of deviation;
- presence of diplopia;
 - child or parental concerns about vision;
 - birth history-including developmental history;
 - glasses wear; and
 - family history.

METHODS

Online databases namely PubMed, Google Scholar and Cochrane Collaborations were searched with keywords "strabismus", "misalignment", "psycho social", "binocular vision". A total of nine records were identified. Only seven full length articles that met the inclusion

criteria were included for this review. For two more studies only abstracts were available. Published protocols, unpublished articles were excluded from this review.

RESULTS

As a result, we could able to find out the immense need for educating and creating awareness to parents of children who have squint and various ways of treating it.

DISCUSSION

Nicholas sawers¹ says about the importance of rapid diagnosis and timely referral which can help in early detection of serious pathological signs. He also suggests the treatment options for benign squints.

1.glasses 2. patching the non-squinting eye
3. surgery

Eugene ² in his commentary says urgent treatment for amblyopia is important especially in young children. sometimes uncorrected refractive error do masks up the strabismus. He explains about amblyopia and strabismus surgery treatments. Refraction under cycloplegia^{1,2}, spectacle correction^{1,2}, surgery^{1,2} are the treatment options in young adults. In extension he also says that eye health workers who deals with children should have a good understanding about early detection and prompt effective treatment for children with strabismus.

Hailong³ in his study states the associated risk factors for childhood strabismus. strabismus is a common contributing factor to amblyopia. Tilting one's head when writing may be a risk factor. Esotropia is more likely to affect stereopsis and be associated with the refractive state of hyperopia.

David R Stager ⁴ in his review explained about the treatment options for strabismus. David⁵ in his study says that out of ninety patients who had undergone cataract surgery 34.4% had pre operative strabismus and 43.3% had post operative strabismus occurred 63.9% and 29.6% children unilateral and bilateral cataract

surgery. Children who operated in young age has more prone to get strabismus.

CONCLUSION

Educating ourselves as practitioners and patients can help in eradicating the treatable misalignment and that can improve the quality of life mainly among children who are in their early stage. Always informing the parents and educating them helps to reduce further damage to the patient. Mainly in kids who can't even explain their symptoms will be benefitted. There are many types of treatment options available but even after operation they tend to increase the deviation is one of the crucial think that need to be concentrated on.

FUTURE SCOPE

There will be a great deal of research into the genetic basis of strabismus as well as manipulations of the muscle myofibrils to alter the course of strabismus. One major advancement has been the better understanding of the use of muscle pulleys, which may lead to a better surgical approach^{6,7}.

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