

Review article:

Socio medical Difficulties of Strabismus In Childhood

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Abstract

Strabismus congenital or aquired deviation of eye position may lead to severe psychosocial problems in childhood and puberty. Depression, interpersonal difficulties in relationships, abuse and mistreatment in school, work, sports and play and feelings of sadness as well as inferiority might be due to deviation of one or both eyes. Consequent ophthalmic examination are necessary to detect and treat strabismus to provide affected children a healthy and happy childhood.

Keywords: Strabismus; Psychosocial problems ; Education ; Sociomedicine ; Sociology.

Bangladesh Journal of Medical Science Vol. 16 No. 02 April'17. Page : 194-195

Introduction

Strabismus is a 'childhood illness' that has long-term relevance in the final visual acuity of an individual and therefore for its further life quality. The prevalence is 7,3% for boys and 6,9% for girls, including all types of strabismus detected with a pathological cover test¹. Relevant risk factors that are associated with a higher risk for strabismus is prenatal cigarette smoking during pregnancy², low birth weight, prematurity, large head circumference and presence of congenital abnormalities³. Congenital abnormalities were more strongly associated with exotropia (one or both eyes are deviated outward) than with esotropia (one or both eyes turn inward) (3). After birth ocular trauma can lead also to rupture of eye muscles with the consequence of an inappropriate position of the eye. Since an adequate position of the eye is fairly important for the development of vision in childhood to avoid amblyopia there are different therapeutical options such as glasses, contact lenses, training of the eye muscles and if the conservative methods are not enough surgery, all with the common goal straightening eyes and consequently optimizing the development of visual system.

Socio medical problems of children with strabismus

Apart from the anatomical and relevant physiological importance of a straight eye position the deviation often results in psychosocial problems in patients.

Eighty-six percent of patients (>15 years) who corrected eye position surgically reported of preoperative embarrassment presurgically⁴. The cosmetic aspect led to trouble in eye contact and development of manners to hide the deviated eye⁴, feelings of sadness and inferiority, difficulty in reading and stereopsis (depth perception)⁵. The psychosocial aspect of strabismus is problematic for all age groups but especially in school this impairment may lead to an unfavorable aspect of school life.

Socialization with other children is mainly with large angle strabismus associated⁶. *Cumcurcu et al.* reported of significant higher incidence of social phobia and separation anxiety in children with strabismus than in the control groups⁷.

Problems in interpersonal relationships were believed from patients due to the eye problem leading to depression in 8% of all patients⁸.

Over 70% of children underwent correction surgery in childhood and remembered this as „traumatic experience“⁸. Never the less 85% of all patients with strabismus evaluated the surgery as positive impact in their lives⁸. After surgery self-confidence and intelligence scores improved significantly in patients^{4,5}. Due to social exclusion of children aged 6 or older with a visible squint strabismus surgery should be

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performed before this age⁹.

More than 50% of all subjects experienced mistreatment due to strabismus with the consequence of having problems in school, work, play or sports⁸. Approximately 70% of people with eye deviation assumed that they were abused and considered strabismus as moderate to severe problem⁸.

So-called occlusion therapy may cause a psychosocial impact in patients with intermittent exotropia, but part-time occlusion alteratively decreased the attention problem in affected children¹⁰. Children with strabismus and high somatic scores had poor compliance to the part-time-occlusion¹⁰.

Adults and children notice a squinting right eye more disturbing than a squinting left eye. Furthermore children judged esotropia worse than exotropia¹¹. Psychosocial problems of adults and children were similar: being made fun by other children (53%), problems with eyesight (39%), other people looking strangely at them (21%), less acceptance in groups (17%), less self-confidence (6%), problems with

judgement of distances (4%) and perception as less intelligent (3%)¹¹.

In summary the results of the current scientific studies show that the psychosocial impact of strabismus (being refused in peers, problems in school, work, sports, interpersonal relationships etc.) do have a much higher personal value for the patient than anatomical eye position deviation and consequently visual impairment.

Conclusion

Children with strabismus might experience in many cases refusal from their psychosocial environment. Squinting of one or both eyes can lead to problems in eye-contact, anxiety, social phobia and problems in school, work, play and sports. Beside the importance of occlusion therapy and corrective strabismus surgery for development of visual system, the psychosocial aspect of strabismus should be considered and necessary medical steps should be initiated early in childhood.

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