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A Rare Case of Marcus Gunn Jaw Winking Phenomenon in a Community Health Setting

MONALISHA SAHU[1]

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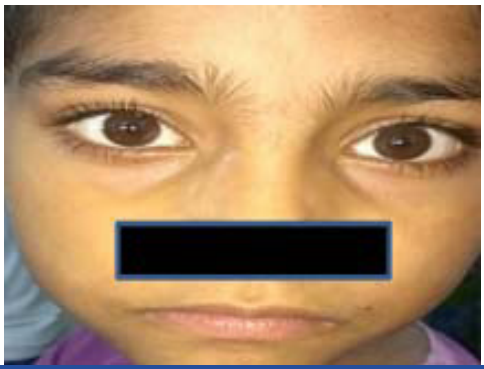
In 1883, Marcus Gunn described a winking reflex in a case of congenital ptosis [1] where with movement of the jaw there is momentary upper eyelid upshot and was named Marcus Gunn Jaw Winking Phenomenon (MGJWP) [2]. It accounts for only 5-8% of patients with congenital ptosis [3].

A 12-year-old boy presented complaining of winking and widening of right eye while chewing or swallowing. There were no other ocular or systemic complaint but he was significantly bothered about the anomalous movements due to continuous mocking by fellow-mates. Boy was born full-term by vaginal delivery with uneventful neonatal period and present growth and development appropriate for age. Mother had noticed this phenomenon in early infancy while breast feeding. On ocular examination ptosis was absent. Visual acuity, fixation, gazing and following movements were normal for both eyes. Upshooting of right upper eyelid and widening of right palpebral fissure was demonstrated on chewing and clenching [Table/Fig-1]. Diagnosis of MGJWP was made in view of the synkinetic nature of the abnormality, despite the absence of ptosis [Video-1].

MGJWP is well-known synkinesis occurs probably due to congenital aberrant connection between oculomotor nerve supplying the levator palpebrae superioris and trigeminal nerve controlling mastication muscles especially pterygoids leading to co-contraction of the involved pterygoid and levator muscles together in 'typical' cases. Few cases also occur in association with other anomalous ocular movements and syndrome such as Duane's and Retinitis Pigmentosa [4,5]. In the fully developed form, the upper eyelid covers varying portions of upper cornea at rest and the wink phenomenon are elicited when the jaw is opened and moved laterally for any masticatory or swallowing action or even for smiling [6]. In rare instances, ptosis itself may be absent and only the jaw winking phenomenon is present. Although the syndrome usually presents unilateral and sporadic, there are reports in which it may present bilaterally e.g., with CHARGE syndrome [7] and familial due to autosomal dominant inheritance pattern [8]. In our patient while there was unilateral synkinetic up-shoot of the right upper eyelid with jaw movements, examination showed no ptosis. It is generally seen that the upshot of eyelid comes down with time, as was felt by the mother of our patient but there has been no objective evidence that synkinesis weakens with time. The management generally depends upon the amount of ptosis and the degree of jaw winking. In our case ptosis was absent and no other anomaly was associated hence there was no need for surgical intervention and only counselling is sufficient. The patient and his family was counselled and called for regular follow up as the child is at high-risk of developing poor psychosocial outcomes as observed in some other cases [9].



[Table/Fig-1]: Temporary elevation of right upper eyelid on chewing movement.

Individuals with rare conditions are likely to face a host of negative outcomes not only because of the disease but also due to lack of a healthy and supportive environment. Hence health facilities should promote formation of Umbrella Groups or Alliances for such rare cases and conduct health education sessions for the community so that they get supportive environment and does not feel left out.

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PARTICULARS OF CONTRIBUTORS:
1. Senior Resident, Department of Community Medicine, University College of Medical Sciences and GTB Hospital, Delhi, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Dr. Monalisha Sahu,
c/o Dr Abani Bhushan Sahu Teacher's Colony, Samlong, Namkum, Ranchi-834010, Jharkhand, India.
E-mail: drmonalisha@outlook.com

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