CASE NOTES

INVERSE MARCUS GUNN PHENOMENON*

BY

JOHN E. ABRAHAM AND EDWARD T. SELVAM

Government Ophthalmic Hospital, Madras

In marked contrast to the jaw-winking phenomenon of Marcus Gunn, which is seen, according to Spaeth (1944), in 2 per cent. of all cases of congenital ptosis, the inverse Marcus Gunn phenomenon is rare (Duke-Elder, 1952; Walsh, 1957).

A young man aged 19 yrs had developed symptoms of facial paralysis on the left side 3 months before admission to the Government Ophthalmic Hospital, and had been treated at another hospital, with some improvement. A month after the onset of this facial palsy he developed pain in the abdomen, for which he attended the Government General Hospital, and during the examination the attending medical officer noticed that the left upper eyelid closed when the patient yawned.

He was not aware of this condition, but on completion of the treatment for the abdominal pain, he was advised to attend Government Ophthalmic Hospital, and was admitted on November 8, 1960.

Family History.—His brothers and sisters had no ocular defect; a photograph of the patient as a small boy showed no ptosis, and there was no history of trauma.

Examination.—The patient's appearance is shown in Fig. 1. Partially-recovered facial palsy of the left side of the lower motor neurone type is seen in Fig. 2 (opposite). There was no other neurological abnormality, and the sense of taste was normal.

Right Eye: Normal, with visual acuity 6/6 for distance, and reads 0·5 D Snellen test type for near. The fundus was normal.

Left Eye: Partial ptosis with normal ocular movements. The visual acuity was 6/12 pty for distance (not improved with glasses), and reads 1·75 D Snellen test type for near. The fundus showed sun-burn of the macula, and the patient was said to have seen the solar eclipse 3 years previously.

The degree of ptosis of the left upper eyelid increased when the patient performed the movements shown in Figs 3–7 (opposite).

Discussion

Movements of the lower facial muscles were associated with a contraction of the orbicularis oculi, so that when the mouth was opened or made the movements of mastication the eye closed. These reactions do not constitute a trigemino-facial association, but are due to events within the territory of the

* Received for publication February 13, 1961.
INVERSE MARCUS GUNN PHENOMENON

Fig. 2.—Raising the eyebrows, showing left facial palsy of the lower motor neurone type.

Fig. 3.—Baring the teeth.

Fig. 4.—Mouth wide open.

Fig. 5.—Whistling.

Fig. 6.—Movement of lower jaw to left.

Fig. 7.—Movement of lower jaw to right.

Facial nerve itself. These abnormal movements are presumably caused by the aberrant regeneration of nerve fibres, some axons growing into the wrong sheath in the anatomical disorder which may accompany regeneration.

Summary

A case of inverse Marcus Gunn phenomenon, which developed during recovery from a left-sided peripheral facial palsy, is reported.

We are most grateful to the Superintendent, Government Ophthalmic Hospital, Madras, for permission to report this case.

REFERENCES


