

HYPOPLASIA OF LATERAL RECTUS AND ABNORMAL INFERIOR OBLIQUE INSERTION

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Presented in Sydney, April 1975.

G.M., a girl aged two years, was first seen by the ophthalmologist six months ago. Her mother said she had had a convergent squint since birth. There was no family history of squint, and the birth was normal. She had a left convergent squint of 45° with left hypertropia of 10° , judged by corneal reflections. Ocular movements showed a right inferior oblique overaction.

She was given a +3.50 sphere each eye for constant wear, with total full-time occlusion of the right eye. This was changed to alternate eye occlusion once she could take up left fixation.

When I first saw G.M., she had a left or alternating convergent squint with hypertropia of the convergent eye. Both right and left abduction were limited to a few degrees at most past the midline, and both inferior obliques were overacting, the right more noticeably than the left.

In January this year both medial recti were recessed by 5mm and the right lateral rectus was resected 6mm. There appeared to be a complete absence of the left lateral rectus, while the left inferior oblique had an anterior insertion; or possibly the left lateral rectus insertion was misplaced and the left inferior oblique inserted elsewhere. The ophthalmologist found no muscle or fibrous band in place of the left lateral rectus, and what he believes to be the left inferior oblique is inserted 7mm from the limbus.

After the operation G.M. still had a left convergent squint of about 15° with 5° left hypertropia. Right and left abduction were much better, although left abduction was still limited. Possibly the eye is more free to move and the misplaced muscle, either left lateral rectus or left inferior oblique, is able to abduct the eye. Cosmetically the result is still not good, so a Hummelshiem's operation may be done a little later.

Although squints of peripheral origin are not as common as neurogenic squints, they are by no means rare; but from the evidence of reported cases, the absence of a muscle is rare. Absence of the lateral rectus was reported by Heuck in 1879, Bahr 1896, Rabstan and Goar 1921, Bielchowsky 1932, and Stockwell 1952. In 1967, two cases were reported in America by Pritikin; after surgery both were cosmetically satisfactory, and the affected eye could be abducted past the midline.

Abnormal insertions are the most common congenital defects in ocular motility. The insertion of the inferior oblique varies chiefly in the degree of obliquity and convexity of the curve, and in gross irregularities such as angular serrations or gaps.

Acknowledgment

I would like to thank Mr. P. Munchenberg for allowing me to present this case history, and Dr. M.C. Moore for his assistance with the literature on the subject.

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