SURGERY OF JAW-WINKING*†

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JAW-WINKING (Marcus Gunn phenomenon) is an inconvenient and embarrassing affliction for which no satisfactory explanation has been given (Duke-Elder, 1952). It is possible to achieve a good cosmetic result by surgery as in the six cases described below.

Material

Seven cases (six male and one female) were seen at the Victoria Memorial Eye Hospital, Colombo, between 1956 and 1963. The syndrome was congenital and associated with ptosis, and one of the males (Case 3) had an associated superior rectus palsy on the same side. One man declined surgical treatment. Clinical particulars of the six patients operated on are given in the Table and the surgical procedures are described below.

TABLE
CLINICAL PARTICULARS OF SIX PATIENTS

Case No.	Sex	Age (yrs)	Visual Acuity		Side Affected	Ocular Movements	Fundi	Refraction
			R	L				
1	M	18	6/6	6/12	L	Full	Normal	Normal
2	M	8	6/18	6/12	L	Full	Normal	with -2 Dcyl. ---, axis 180°, 6/6
3	M	15	6/6	6/6	R	Right superior rectus palsy	Normal	Normal
4	M	17	6/6	6/6	L	Full	Normal	Normal
5	F	27	6/18	6/6	R	Full	Normal	Normal
6	M	26	6/6	6/6	R	Full	Normal	Normal

Surgery

Case 1.—Complete division of levator insertion through an anterior approach. Ptosis corrected by Hunt-Tansley method at the same time. Cosmetic and functional results good.

Case 2.—Division of levator insertion through an anterior approach, and ptosis corrected by Hunt-Tansley method. Although the synkinesis was eliminated, the ptosis was not much improved; 4 months later Reese's modification of the Machek operation was performed with a good cosmetic and functional result (Figure, opposite).

Case 3.—A two-stage operation was planned. On May 28, 1957, the levator insertion was divided through an anterior approach. It was proposed to correct the ptosis 3 weeks later, but the

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FIGURE.—Case 2 (a) Normal position; (b) Lid elevation on opening mouth; (c) Post-operative normal position; (d) No elevation of lid on opening mouth post-operatively.

synkinesis returned because the levator muscle became re-attached. On June 11, 1957, therefore, the insertion was divided again and a good portion of the muscle was resected. At the same time the ptosis was corrected by the Hunt-Tansley method.

Case 4.—Division of levator insertion with a wide resection of the muscle through an anterior approach. The ptosis was corrected by the Hunt-Tansley method at the same time, but this was not very successful; a second operation of the Hess type was performed on January 5, 1960, and the ptosis was much improved.

Case 5.—Division of levator insertion, a fairly large portion of muscle being resected. Hunt-Tansley ptosis operation also performed at the same time. Cosmetic and functional result good.

Case 6.—Division of levator insertion, a fairly large portion of muscle being resected. Ptosis corrected by Hunt-Tansley method. Cosmetic and functional result good.

Discussion

One method of correcting jaw-winking by surgery is to divide the motor root of the Vth nerve (Grant, 1936), but this carries the risk of an intracranial operation. The other method is to resect the levator palpebrae superioris. It was found that a fairly large portion of muscle had to be resected to avoid the possibility of re-attachment. This dissociates the linked movement of the lid and jaw, but causes a complete

paralytic ptosis, so that it is then necessary to create a normal palpebral aperture with elevation of the lid. The superior rectus (Spaeth, 1947, 1948), the occipitofrontalis, and the orbicularis (Spaeth, 1951) have all been utilized.

In the present series, the Hunt-Tansley operation was employed after division and resection of the levator muscle. Cases 2 and 4 required a second operation—a modified Hess type and Reese's modification of the Machek operation respectively.

Both the resection of the levator and the correction of the ptosis may be carried out on the same day, which saves operating time and minimizes scarring.

Summary

Six cases of congenital jaw-winking with ptosis were operated on by the anterior route, dividing the levator insertion and correcting the ptosis by the Hunt-Tansley method at the same time. Some required a second operation, but all achieved good cosmetic and functional results.

REFERENCES

- DUKE-ELDER, S. (1952). "Text-book of Ophthalmology", vol. 5, p. 4689. Kimpton, London.
 GRANT. (1936). *Cited by Duke-Elder (1952)*, p. 4691.
 SPAETH, E. B. (1947). *Amer. J. Ophthal.*, **30**, 143.
 ——— (1948). "Principles and Practice of Ophthalmic Surgery", 4th ed, Lea and Febiger, Philadelphia.
 ——— (1951). *Trans. ophthal. Soc. U.K.*, **71**, 407.