

coagulation time with a normal platelet count occurs in hemophilia, in obstructive jaundice, and in hemorrhagic disease of the newborn. In hemophilia there is a deficiency of thromboplastin; in obstructive jaundice and hemorrhagic disease of the newborn there is a deficiency of prothrombin. This can be corrected by the administration of vitamin K, but to give vitamin K in all cases of bleeding without first determining a real deficiency of prothrombin is of no value.

In all severe hemorrhages the first and most urgent concern is to control and stop the bleeding. Secondly, the depleting effects of the hemorrhage must be remedied by the use of general supportive measures. These include rest and administration of iron and, if the loss of blood has been sudden and severe, blood transfusion. Appropriate sedation may prevent a recurrence of the bleeding until the ruptured vessel has healed or thrombosed.

References

1. Hall, S. S., and Thomas, H. V.: Spontaneous hemorrhage into maxillary sinus. *Arch. Otolaryng.* **28**:371-375 (Sept.) 1938.
2. Hirsch, C.: Ligation of internal maxillary artery in patients with nasal hemorrhage. *Arch. Otolaryng.* **24**:589-593 (Nov.) 1936.
3. Salinger, S., and Pearlman, S. J.: Hemorrhage from pharyngeal and peritonsillar abscesses; report of cases, resume of literature and discussion of ligation of carotid artery. *Arch. Otolaryng.* **18**:464-509 (Oct.) 1933.
4. Moersch, H. J.: Further studies on treatment of esophageal varices by injection of sclerosing solution. *Ann. Otol. Rhin. & Laryng.* **50**:1233-1244 (Dec.) 1941.

OCULAR TORTICOLLIS

Report of a Case

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The term "ocular torticollis" was applied by Cuignet in 1874 to a compensatory tilting of the head in cases of paralysis of one of the muscles controlling the vertical movements of the eye. The patient unconsciously assumes this position to avoid diplopia.

▾ The following case is presented to show the need for eye muscle studies in all cases of torticollis.

Case Report

A 57-year-old woman reported to Cleveland Clinic in October, 1944, with the complaint of "sore neck" and "spasm of neck muscles". She stated that for twelve years she had had a "drawing" of the neck, which had noticeably increased during the past two years. Examination revealed the head (chin) turned to the left, the patient having difficulty straightening her head.

There was decided apparent hypertrophy of the right sternomastoid muscle. X-ray examination of the cervical region of the spine showed a slight cervical dorsal scoliosis of the cervical and dorsal regions of the spine. Considerable osteoarthritis was present in the cervical area, and there was some calcification of the intervertebral discs.

The intervertebral spaces were narrowed below the level of the fifth cervical vertebra. The impression was osteoarthritis of spine, cervical region. Laboratory reports showed blood Wasserman and Kahn tests negative, other reports within normal limits. Blood pressure was 135/85; heart and lungs were normal.

It was believed that the patient had a spasmodic torticollis, and she was placed on physiotherapy, from which she received partial relief.

On February 27, 1946, she returned to the Clinic with symptoms in the neck as before. She had recently had her lenses changed and consequently was referred to the department of ophthalmology for determination of any contributing etiologic factors.

Ophthalmologic examination revealed visual acuity O.D. 6/9-3, O.S. 6/12. External examination negative except for ocular muscles. The fundus was negative O.U. Refraction with cycloplegia: O.D. plus 1.00 sphere combined with a plus 0.75 cylinder axis 180 in each eye, with vision corrected to 6/6. Muscle balance tests showed: at 6 meters, 6 prism diopters exophoria and 10 prism diopters right hyperphoria; at 33 centimeters, 10 prism diopters exophoria and 7 prism diopters right hyperphoria. Tests revealed a crossed and vertical diplopia. The chin was inclined to the left, with the head tilted to the right.

Operation was recommended, but the patient refused at this time. As a palliative measure she was advised to wear a clip over one eye.

Discussion

This case demonstrates ocular torticollis and its most common cause, paresis of the superior rectus muscle on the side of the head tilt, with overaction of the inferior oblique muscle on the opposite side.

Ocular torticollis must be distinguished from spasmodic torticollis, due to unilateral spastic contracture of the sternomastoid muscle, in order to avoid ineffective operative procedures.

Differential Diagnosis

Spasmodic Torticollis

1. Head tilt usually obvious.
2. Gross contracture of sternomastoid muscle on "tilt" side of neck.
3. Head cannot be passively straightened.

Ocular Torticollis

1. Head tilt usually less obvious.
2. No true contracture of sternomastoid muscle. Slight degree of "tightness" of structures on "tilt" side of neck.
3. Head can be passively straightened, but interferes with ability of patient to maintain binocular vision because of manifest vertical divergence of the visual axes. Patient "fixes" with one eye only, neglects image of other. (Suppressed). If suppression does not occur, diplopia is experienced.

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| 4. Face always turned upward and away from side of head tilt. | 4. Face usually turned slightly toward side of head tilt, and in some cases, downward. |
| 5. Conjugate ocular movements normal. | 5. Conjugate ocular movements abnormal. |
| 6. Extra-ocular muscle balance normal. | 6. Hypertropia of one eye, hypotropia of other eye. Head tilted toward hypertrophic eye. |

Treatment

The treatment of ocular torticollis is primarily operative. The condition can be corrected by advancing or shortening the affected muscle. Orthoptic exercises may be necessary following operation in some cases. Prisms in low powers (never over 6^Δ) may be ordered if necessary. In cases of long standing it may be necessary, due to the apparent hypertrophy of the sternomastoid muscle, to do an intradural section of the anterior motor roots of the first three cervical nerves on both sides. This is usually followed by peripheral section of the spinal accessory nerve on the affected side. The correction of refractive errors has little effect on this condition.

The examination of all torticollis cases should include a complete examination of the eye muscles for possible imbalance, as ocular torticollis can be corrected by operation on these muscles. All cases of suboccipital headache and pain in the neck should be checked for vertical muscle imbalance.

Summary

1. A case of ocular torticollis has been presented.
2. A differential diagnosis between spasmodic and ocular torticollis is described.
3. The treatment of ocular torticollis is primarily operative.
4. The examination of all cases of torticollis should include the study of the eye muscles for any imbalance.