

Oblique muscle surgery for treatment of nystagmus with head tilt.

[Lueder GT¹](#), [Galli M.](#)

[Author information](#)

Abstract

BACKGROUND:

Patients with nystagmus may adopt an abnormal head posture if they have a null zone in eccentric gaze. These patients uncommonly present with torticollis due to a null zone when the head is tilted. We describe the results of surgery on the oblique muscles to improve the abnormal head posture in this condition.

METHODS:

This was a retrospective review of patients who had head tilts due to null zones of nystagmus. Surgery consisted of an anterior 50% tenectomy of the superior oblique tendon on one side and recession of the inferior oblique muscle to a position 6 mm posterior to the insertion of the inferior rectus muscle on the contralateral side. The patients' clinical histories and outcomes were reviewed.

RESULTS:

Six patients underwent the procedure. Of these, four had infantile nystagmus syndrome and two were born prematurely and had histories of intraventricular hemorrhages. Five of the patients had previous Kestenbaum surgery that corrected the horizontal component of their abnormal head postures. Age at time of surgery for the head tilt ranged from 3 to 13 years. Postoperative follow-up ranged from 1.5 to 3 years. The preoperative head tilts ranged from 25° to 45° (mean, 39°). The postoperative improvement ranged from 20° to 40° (mean, 28°). One of the patients with a history of intraventricular hemorrhage required additional surgery for strabismus unrelated to nystagmus.

CONCLUSIONS:

Anterior tenectomy of the superior oblique tendon combined with contralateral recession of the inferior oblique muscle improved head tilts related to a null zone of nystagmus.