Selection strategy of different surgical methods for abducens nerve palsy

**Purpose:** To explore the selection strategy of different surgical methods for paralytic esotropia caused by abducens nerve palsy.

**Method:** A total of 21 cases of paralytic esotropia were studied. Two cases were congenital and two cases were traumatic. There were 17 cases with unknown reasons. The paralytic symptoms of these patients were stable for more than 6 months and there was nothing abnormal detected in the MRI examination of orbital region and brain. Each patient was evaluated for ocular muscles exams including strabismus degree, eye movement, traction test, orbital check and MRI of the brain. Patients with refractive errors accepted the correction of ametropia before the surgery. Different surgical methods were selected according to the extent of paralysis, limited degree of eye movement, strabismus degree and the outcome of traction test. There were four patients with incomplete paralysis. One of them was given the method of medial rectus recession combined with external rectus amputation, and another three were given the way of Jensen's procedure or combined with medial rectus recession. A total of 17 cases had complete paralysis. According to the level of the medial rectus contracture and the degree of strabismus, Kraft's procedure was applied to fourteen patients. Knapp's procedure was applied to three patients. The target was tried to correct strabismus by one-stage surgery.

**Results:** The esotropia of 19 patients were corrected over the 2-years follow-up. Abduction function of the eyeball movement was improved after the surgery. Two patients were regressed after one month and the cure rate was 91.30%.

**Conclusions:** To obtain the excellent surgical results, surgical options for paralytic esotropia caused by abducens nerve palsy can be selected according to the degree of the paralysis, limited degree of eye movement and traction test.

**Biography**

Xiaoqin Jin is the Vice Chief Physician, the member of International Academy Orthokeratology Asia (IAOA), the member of China Association for Myopia Prevention and Control, and the Director of Ophthalmology Branch of Chinese Association of Minority Medicine. She has worked at the Xiantao Hospital of Traditional Chinese Medicine in Hubei province during 1994 to 2003. Currently, she is working as the Chief Dean of Pediatric Ophthalmology department at the Wuhan Eyegood Ophthalmic Hospital. She has published numerous papers in various Chinese journals. Her work focuses on the development of Pediatric Ophthalmology. She has completed more than 13,000 operations in terms of microscopic strabismus, nystagmus and posterior scleral reinforcement surgery.

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