Exploring The Causes And Secondary Procedure Choice Of Consecutive Esotrooia After Surgery In Intermittent Exotrooia

Tong Qiao, Wenting Luo, Haiyun Ye, Sihong Li and Quanli Chen
Shanghai Jiao Tong University, China

Introduction: The incidence of consecutive esotropia following surgery to correct for primary exotropia has been reported to be 6-20%. Comitant consecutive esotropia with small deviation disappears spontaneously with time. However, surgical managements should be considered as the esotropia (>15 prism diopter) persisting more than six months. Many surgical approaches have been described to correct consecutive esotropia.

Objective: To investigate the cause and secondary procedure choice of consecutive esotropia after intermittent exotropia surgery, while to find individual procedure to avoid the occurrence of consecutive esotropia corresponding the appropriate surgical methods and amount.

Methods: The medical records of 40 patients who underwent surgical correction of consecutive esotropia, which conducted between June 2014 and June 2017, were retrospectively reviewed. Consecutive esotropia was defined as residual manifest esodeviation of 15 prism diopter (PD) at 6 months postoperatively. Successful correction of consecutive esotropia was defined as the lack of manifest or intermittent esophoria/exophoria within 8 PD. Patients was analyzed for the cause of consecutive esotropia. Unilateral lateral rectus advancement was designed before surgery in all patients.

Results: In our procedure, we found 24 in 40 cases (60%) consecutive esotropia after intermittent exotropia correlated with the abnormal insertion of inferior oblique muscle in the main squint eye; 10 in 40 cases (25%) without any reason, 6 in 40 cases with slipper of recessed lateral rectus and scar. Unilateral lateral rectus advancement was successful in the correction of consecutive esotropia in 37 of 40 cases (92.5%). 30 of 37 (81.1%) patients obtained binocular fusion and stereopsis improvement.

Conclusion: The occurrence of consecutive esotropia was correlated with the condition of binocular fusion, the type of intermittent exotropia and the appearance of vertical deviation. Unilateral lateral rectus advancement generally provides enough correction for most consecutive esotropia. Surgeons should consider the vertical deviation, especially in patients with oblique overreaction.

Biography
Tong Qiao is the Director of Ophthalmology at Shanghai Children’s Hospital affiliated to Jiaotong University, China.

qiaojoel@163.com