

Comments on: Short-term outcome of botulinum neurotoxin A injection with or without sodium hyaluronate in the treatment of infantile esotropia - A prospective interventional study

Dear Editor,

Pandey N and colleagues need to be commended for replicating, in Indian population, the study comparing outcomes of botulinum neurotoxin A injection with and without sodium hyaluronate (SH) in treating infantile esotropia (IET).^[1] We would like to make certain observations. Chen and colleagues describe constitution of toxin-SH done at 4°C.^[2] The protocol here is unclear; the concentration of SH unspecified. The variable viscosity of two solutions is self-revelatory making blinding of the surgeon unlikely.

The authors fail to define primary and secondary outcome measures making this comparative study replete with post hoc fallacies. The palpebral fissure height pre-injection is unmeasured; only post injection droop has been graded. The presence or absence of pre-injection vertical deviation remains unquantified with complication of induced vertical deviation being graded as per measured deviation post-injection.

The incidence of dissociated vertical deviation (DVD) in IET varies from 51% to 98%.^[3] Though the incidence increases beyond 1.5 to 2 years of age, Hiles and colleagues have reported inferior oblique overaction and DVD as 15% and 2% in 3 to 10 months age group.^[4] The corneal reflex based estimation fails to address whether the DVD being manifested was part of vertical misalignment measured post injection.

The complication rate comparison between SH and Control group, reported *P* value of 0.14 as statistically significant, contradicting that *P* value <0.05 was statistically significant.

In botulinum toxin injections for IET, the aim is to achieve overcorrection which reduces subsequently.^[5] However, whether the deviation was esotropia throughout or changed from an initial overcorrection remains unspecified.

Comparisons that were excluded like; outcomes of sensory data, DVD, A and V patterns, and fusion maldevelopment nystagmus would make the study more meaningful. We also look forward to further studies analysing the cost-effectiveness of adding an expensive molecule to botulinum toxin and the effect it would have on surgical outcomes.

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Nil.

Conflict of interest

There are no conflicts of interest.

Ashish Doshi, Prachi Agashe, Shalaka Kshirsagar

Department of Paediatric Ophthalmology, Strabismus and Neurophthalmology, K.B. Haji Bachooali Eye Hospital, Mumbai, Maharashtra, India

Correspondence to: Dr. Prachi Agashe, Agashe Hospital, 116, Vrindavan, Bazar Ward, Off L.B.S Road, Kurla West, Mumbai - 400 070, Maharashtra, India.
E-mail: docprach@yahoo.co.in

References

1. Pandey N, Agrawal S, Srivastava RM, Singh V. Short-term outcome of botulinum neurotoxin A injection with or without sodium hyaluronate in the treatment of infantile esotropia—a prospective interventional study. *Indian J Ophthalmol* 2020;68:1600-3.
2. Chen J, Deng D, Zhong H, Lin X, Kang Y, Wu H, *et al.* Botulinum toxin injections combined with or without sodium hyaluronate in the absence of electromyography for the treatment of infantile esotropia: A pilot study. *Eye* 2013;27:382-6.
3. Neely DE, Helveston EM, Thuente DD, Plager DA. Relationship of dissociated vertical deviation and the timing of initial surgery for congenital esotropia. *Ophthalmology* 2001;108:487-90.
4. Hiles DA, Watson BA, Biglan AW. Characteristics of infantile esotropia following early bimedian rectus recession. *Arch Ophthalmol* 1980;98:697-703.
5. Mcneer KW, Magoon EH, Scott AB. Chemodenervation therapy: Techniques and indications. In: Rosenbaum A, Santiago A, editors. *Clinical Strabismus Management- Principles and Surgical Techniques*. Philadelphia, USA: W. B. Saunders Company; 1999. p. 423-32.

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