

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo
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Service (sector) Strabismus N° CEP

Botulinum treatment for horizontal strabismus in children with cerebral palsy.

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Purpose: To show the results of botulinum toxin injection as treatment for horizontal strabismus in children with cerebral palsy, using a forceps developed by Dr. Tomás Mendonça as a method of injection of the botulinum A toxin. **Methods:** A group of 24 patients, age 6-156 months, 15(62,5%) male and 9(37,5%) female, with cerebral palsy and horizontal strabismus (17 esotropias ranging from 25 to 45 PD and 7 exotropias ranging from 20 to 45 PD) were treated with botulinum toxin (34 medial rectus and 14 lateral rectus muscles). The children underwent full ophthalmic examination. Dosages of drugs for an individual muscle ranged from 2.0 to 6.0U. The injection treatment was done after sedation (inhalatory anaesthesia with sevoflurane mask 3 to 4%) using the Mendonça's forceps. The follow-up was done in 7 days, 15 days and monthly. Deviation of ≤ 10 PD after 6 months of follow-up was considered satisfactory. If the results weren't satisfactory we could do a second application. **Results:** In the group of esotropia (n=17) 12 (70,6%) had final deviation of ≤ 10 PD with only one application after 6 months of follow-up and 8 (47,1%) after one year. All of these patients had previous deviation ≤ 35 PD. The results in all patients with exotropia after only one application weren't satisfactory. There were seven children that underwent a second application (4 with exotropia and 3 with esotropia). Two patients with exotropia had satisfactory results after one year of the second application. The side effects were: subconjunctival hemorrhage in 4 (16,7%), transient vertical deviation in 4 (16,7%) and transient ptosis in 22 (91,7%). There were statistical significant differences between the palpebral fissure width before and after the injections. **Conclusion:** in these study according to the literature the results in esotropia were better than exotropia, mainly when the previous deviation was ≤ 35 PD. The use of botulinum toxin was a good alternative treatment for horizontal strabismus in children with cerebral palsy.