

Discussion.— SEF is a major cause of disability for stroke patients, impairing their daily living activities, social participation and quality of life. When this deformity is primarily due to muscle overactivity, various focal treatments including selective neurotomy can be proposed together with the rehabilitation program. This neurosurgical procedure consists of a partial and selective section of the motor nerve branches that innervate spastic muscles. For a low cost, it can permanently reduce muscle overactivity. However, its effectiveness had only been suggested through uncontrolled case series studies [1], mainly focussing on body structures and functions.

The present study demonstrates with a high level of scientific evidence that tibial nerve neurotomy is an efficient treatment of SEF, reducing impairments of chronic stroke patients. Future studies should still be conducted in order to confirm the long-term efficacy of this treatment following the International Classification of Functioning, Disability and Health (ICF).

Reference

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<http://dx.doi.org/10.1016/j.rehab.2012.07.842>

CO26-005-e

Study on the interest of applying anesthetic cream before intramuscular botulinum toxin injections in children and adolescents with cerebral palsy

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Objective.— To study the interest of the use of an anesthetic cream in prevention of the pain during the injections of botulinum toxin at the child and the teenager.

Method.— The evaluation is realized in two populations of cerebral palsy children and teenagers. A population receives the application of anesthetic cream before the injections. Other population is injected without anesthetic cream. The pain is estimated by a score EVA or a scal of CHEOPS according to the capacities of the patient. The “reactivity” is appreciated in “important, average, low, no”.

In 2011, we presented a preliminary study but series, too small did not allow a statistical study.

Results.— We have 193 medical records. The clinical forms were variable (classification GMFCS). Ninety-seven were evaluated their pain on an EVA, 96 other, are estimated by the CHEOPS. Ninety-six had received anesthetic cream, 97 were injected without. Two populations were homogeneous. The average of EVA is 2,9 with the cream 2 without. The average of CHEOPS is 7 with the cream, 7,2 without. We also analyze the results according to the age, to the number of muscles, concerned limbs or an adjuvating treatment.

Discussion.— Other factors such as the waiting time before injection is probably involved in the patient's anxiety.

The passage of the skin seems to us also less painful since we use the electric stimulation, the needles being finer.

It is more often to the injection of the product than to the passage of the skin that the child reacts.

Conclusion.— This work does not justify the usefulness of applying an anesthetic cream prior to injections of botulinum toxin in cerebral palsy children and adolescents to decrease the pain induced.

Further reading

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<http://dx.doi.org/10.1016/j.rehab.2012.07.843>

CO26-006-e

Intrathecal baclofen treatment in early stage of severe brain damaged subjects: Case-report and literature review

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Keywords: Intrathecal baclofen; Brain damaged subjects; Early stage; Muscular hypertonia; Awakening

Introduction.— Intrathecal baclofen is known as an effective treatment of muscular hypertonia in chronic stages of vascular or traumatic brain damaged subjects [1]. Its interest in early management is supported by its effects on neurovegetative crisis [2].

Materials and methods.— A 61-year-old female patient in persistent vegetative-nervous state two months after a bilateral anterior cerebral artery stroke, presented with spastic tetraplegia and equine retracted feet despite an optimal antispastic treatment (oral treatment and botulinum toxin injections). Considering a global muscle hypertonia with a mean score (MAS) of 3.8 on inferior limbs and 3 on superior limbs, and after positive intrathecal baclofen test, pump implantation was decided on day 90 after stroke.

Results.— An improvement of hypertonia of 2 points (MAS) on inferior limbs and of 1.4 on superior limbs facilitating the patient's nursing and bed positioning, as well as an improvement of WHIM of 21 points were noted one week after treatment. No complication was reported.

Discussion.— A diffuse muscle hypertonia with secondary neuro-orthopedic complications can appear in early stages after a severe brain damage. Our case emphasizes the importance of screening and early management of those muscle tonus troubles, with particular interest in early intrathecal baclofen treatment.

References

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<http://dx.doi.org/10.1016/j.rehab.2012.07.844>

CO26-007-e

Adverse events of chronic intrathecal baclofen infusion: A descriptive one-year follow-up of 158 consecutive patients followed during one year

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Keywords: Intrathecal baclofen pump; Complication; Adverse event; Spasticity

Objective.— To describe the adverse events (AE) occurring after intrathecal baclofen (ITB) pump placement.

Patients and methods.— We prospectively collected all the AE occurring in patients receiving ITB via a pump, from the rehabilitation setting of R.-Poincaré Hospital during 2010.

Results.— 158 patients were enrolled, mean age 46 years and 65% male. 128 patients were former implanted (FI) and 30 had a pump placement during 2010: 20 new-implanted (NI) and 10 replacements (R). Most of patients were SCI patients (44 paraplegic and 23 tetraplegic) and MS patients (45). 18% of the patients had one or more complications (38 complications). For a total follow-up of 1665 months, there were 0,023 complications per pump-month.