

## Pain during injections of botulinum toxin in children: Influence of the localization technique

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R�sum� en anglais	<p><b>Objective</b> In this study, we consider two localization techniques used in injections of botulinum toxin in children: electrical stimulation and ultrasound. The hypothesis of this work was that injections performed without stimulation would be less painful.</p> <p><b>Patients and methods</b> Monocentric prospective study, with 107 sessions of lower limb injections. Two groups of children were compared: localization by ultrasound only (60 children), detection by stimulation only or by stimulation combined with ultrasound (47 children). Pain assessment was performed by the child or an accompanying party using the Visual Analog Scale (VAS) and by a health care team using the Face, Legs, Activity, Cry, Consolability (FLACC).</p> <p><b>Results</b> A significant difference between the two groups was found in both self-report and by means of the behavioral observational pain scale. Indeed, VAS average and FLACC average were significantly higher with detection by stimulation than with ultrasound alone: <math>4.5 \text{ cm} \pm 2.54</math> versus <math>2.7 \text{ cm} \pm 2.27</math>; <math>P &lt; 0.001</math> for VAS scale and <math>3.7 \pm 2.1</math> versus <math>2.7 \pm 2.3</math>; <math>P &lt; 0.05</math> for FLACC scale.</p> <p><b>Conclusion</b> When compared to ultrasound detection, localization by electrostimulation appears to increase the overall pain caused during injections of botulinum toxin in children.</p>
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