

# Effect of botulinum toxin treatment in children with cerebral palsy.

No registrations found.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON21315

### Source

NTR

### Brief title

The BOLIEN project

### Intervention

### Outcome measures

#### Primary outcome

1. Gross Motor Function Measure (GMFM);
2. Energy cost of walking.

#### Secondary outcome

1. Spasticity of the treated muscles;
2. Passive range of motion of lower extremity joints;
3. Edinburgh Visual Gait score (GAIT);
4. Pediatric Evaluation Disability Inventory (PEDI), domain 'mobility';

## Study description

### Background summary

National (dutch) multicenter trial;

Intervention:

Multilevel treatment with botulinum toxin A (BTX). Possible target muscles for a multi-level treatment are the psoas, medial/lateral hamstrings, hip-adductors, rectus femoris, triceps surae, and tibialis anterior/posterior unilateral or bilateral. Starting one week after the multi-level BTX-injections, the patients will be treated by a physiotherapist according to a standardized treatment protocol for 12 weeks.

Randomisation:

The patients will be randomized into two groups in a multiple baseline design. Follow-up measurements will be performed at 6, 12, 24 and 48 weeks.

Uitkomstmaten (prim sec?):

Gross Motor Function Measure (GMFM), energy cost of walking, gait analysis, mobility questionnaire, spasticity, and passive range of motion of lower extremity joints.

### Study objective

Multi-level botulinum toxin-A (BTX-A) treatment of the lower extremities in combination with comprehensive rehabilitation leads to an improvement in mobility of children with cerebral palsy.

### Study design

N/A

### Intervention

Group A will receive multi-level BTX injections 6 weeks after the first assessment, group B after 30 weeks.

## Contacts

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## Eligibility criteria

### **Inclusion criteria**

1. Diagnosis of cerebral palsy (CP), hemiplegia or diplegia, ability to walk with or without a walking aid, with or without an ankle-foot orthosis;
2. gait characterized by persistent flexion of the hip and knee in mid-stance when walking;
3. age between 4 and 12 years.

### **Exclusion criteria**

1. BTX treatment in lower extremities 16 weeks before inclusion;
2. Orthopaedic surgery 24 weeks before inclusion;
3. Contra-indication for BTX-A;
4. Contra-indication for general anaesthesia;

5. Severe fixed contractures;
6. Orthopaedic deformities, which have a bad influence walking:
  - 6.1 (Sub)luxation of the hip with a migration index > 50 degrees;
  - 6.2 Hip endorotation contracture > 15 degrees;
  - 6.3 Flexion contracture of knee > 15 degrees;
7. Presence of ataxia or dyskinesia;
8. Other problems which have a negative influence on walking.

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	01-02-2001
Enrollment:	47
Type:	Actual

## Ethics review

Positive opinion	
Date:	26-05-2005
Application type:	First submission

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

Register	ID
NTR-new	NL21
NTR-old	NTR41
Other	: Stichting Bio-Kinderrevalidatie (PGO 01-0134)
ISRCTN	ISRCTN35169306

## Study results

### Summary results

Arch Phys Med Rehabil. 2006 Dec;87(12):1551-8.