



INTRODUCTION OF BOTOX FOR CHILDREN WITH CEREBRAL PALSY
in the National Center of Wellbeing, Development and Rehabilitation of Children, Tirana, Albania

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BACKGROUND

The National Center of Wellbeing, Development and Rehabilitation of children (NCWDRCH) in Tirana, Albania is a multidisciplinary, diagnostic, treatment, education and training center in regards to development and rehabilitation of children from 0-6 years of age. Different pathologies are treated with in the center like cerebral palsy, autism, intellectual disability, Down syndrome other genetic syndromes. The multidisciplinary team is composed of pediatricians, psychiatrist, psychologists, social workers, occupational therapists, speech therapists and physiotherapists, etc.

The center is the only national center in regards to developmental problems in early childhood and offers its services ambulatory for the children who live in Tirana. The children from all over Albania can be hospitalized together with their mothers.

INTRODUCTION

The “**Center of Developmental and pediatric Neurorehabilitation**” (CDN) in Biel, Switzerland, has been working in close cooperation with the NCWDRCH since July 2005. The doctors and the therapists are supervised and trained in diagnostic and treatment procedures. So it was possible to introduce with the permission of the Albanian government for the first time the treatment with botulinum toxin type A (Botox®) for children with spastic cerebral palsy.

AIM:

There are many challenges of managing this introduction. We want to evaluate and discuss the medical, therapeutic, organizational advantages and disadvantages of this introduction.

RESULTS:

Most children could clearly profit from the additional BOTOX® treatment. One great advantage was the daily therapy after BOTOX® injection. The disadvantages of having no optimal orthoses and plaster in Albania has had not so much impact.

CONCLUSION:

Thanks to the partnership between NCWDRCH and CDN Albanian children with cerebral palsy can profit now from multimodal BOTOX® treatment concept which will improve and change positively their lives and those of their families.

The Albanian Ministry of Health is working to introduce Botox as part of the multi treatment of the spastic cerebral palsy.

METHODS:

From March 2009 till now a total of 20 children with spastic CP were injected by a multilevel approach.

The multidisciplinary team followed the steps below:

1. Pre-botox examination and evaluation
2. Goal settings, the team coordinating it with the parents and child
3. Production and adjustment of orthopedic devices where it was possible
4. Botox injections
5. Physical and occupational therapy
6. Evaluation every six weeks, 3 months and six months post botox
7. Repetition of botox injections

17 patients were hospitalized for 2 months and received daily physiotherapy and/or occupational therapy. Treatment results were standardized evaluated using the established clinical measures and scores like ROM, GAS, Ashworth scale etc.



K.S. -8 years old

Diagnosis: Spastic cerebral palsy.

Botox was injected for the third time at m.m adductor longus, hamstring gastrocnemius and orthosis were introduced followed by intensive physiotherapy.

Outcome: Spasticity reduced, can walk a few steps alone.

FEBRUARY 2010

APRIL 2010

ROM

	<i>Left</i>	Right		Left	Right
Tardieu Soleus/Gastro	10/+20	10/20	Tardieu Soleus/Gastro	/	/
Catch KneeF/KneeE	0/-25	0/-20	Catch KneeF/KneeE	10/-20	0/-20
OSG De; KneeF/KneeE	10/-5	+10/0	OSG De; KneeF/KneeE	10/0	+10/0
ActiveDE;KneeF/KneeE			Active DE;KneeF/KneeE		

	Left	Right		Left	Right
MASS Triceps	2	2	Mass Triceps	2	2



K.SH. – 6 years old

Diagnosis: Spastic cerebral palsy.

Botox was injected for the second time at m.m adductor longus, gastrocnemius, hamstring and triceps surae followed by physiotherapy. Orthosis will be introduced when available.

Outcome: Can walk alone, spasticity reduced.

December 2009

March 2010

ROM

	Left	Right		Left	Right
Tardieu Soleus/Gastro	10/10	0/21	Tardieu Soleus/Gastro	10 /10	10 /10
Catch KneeF/KneeE	+5/-25	0/-20	Catch KneeF/KneeE	10/-10	0/-20
OSG De; KneeF/KneeE	+15/0	0/-10	OSG De; KneeF/KneeE	20/0	10/-10
ActiveDE;KneeF/KneeE	/	/	Active DE;KneeF/KneeE		

	Left	Right		Left	Right
MASS Triceps	3-4	3-4	Mass Triceps	3	3



A.H. -4 ½ years old

Diagnosis: Spastic cerebral palsy.

Botox was injected for the third time at m.m adductor longus, hamstring biceps and triceps surae followed by intensive physiotherapy.

Outcome: Spasticity reduced, better movements, can not walk .

September 2009

March 2010

ROM

	Left	Right		Left	Right
Tardieu Soleus/Gastro	20/0	0/21	Tardieu Soleus/Gastro	20 /10	10 /10
Catch KneeF/KneeE	-10/0	0/-10	Catch KneeF/KneeE	0/-10	0/-10
OSG De; KneeF/KneeE	+10/0	10/10	OSG De; KneeF/KneeE	20/0	10/0
ActiveDE;KneeF/KneeE	/	/	Active DE;KneeF/KneeE	/	/

	Left	Right		Left	Right
MASS Triceps	3-4	3-4	Mass Triceps	3	3