



# Centralstimulant treatment of ADHD/ADD in Children with Epilepsy

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**Purpose: Evaluation of efficacy and tolerability of centralstimulant treatment in children with epilepsy**

Medical treatment of ADHD in children with epilepsy as well as psychological counselling are natural parts of the offer in a setting of Comprehensive Care.

Our purpose is to present procedures and results of the daily clinical work.

**Methods:** Retrospective analysis of the 32 children with epilepsy who received centralstimulant treatment in 2006 at the Danish Epilepsy Centre. 2997 children 0-17 years attended the hospital in 2006, admitted or in the out-patient clinic.

**Sample:** 9 girls, 23 boys. Age 6 to 18, (mean 10)  
Full scale IQ 40 to 117 (WISCIII mean 72, in 25)  
IQ < 80 in 14  
4 testing uncompleted  
3 were not testable

**All fulfilled DSM IV criterias for ADHD**

**Seizures by start of centralstimulants :** 22 seizure free, 7 not seizure free, 3 uncertain.

## Procedure:

1. Suspicion of ADHD is raised by parents, medical doctor, the staff at the word or psychologist
2. Seizure freedom and stable medical treatment is pursued
3. The child is tested by child neuropsychologist, intelligence, attention, hyperactivity, impulsivity are evaluated
4. The parents are interviewed, records from the school obtained
5. The child is admitted if ADHD is confirmed
6. The parents fill in a rating scale of the childs behaviour before introduction of medication
7. Treatment starts with 5 mg. Methylphenidate mane, depending on the childs response raised by 5 mg. up to 20 mg. morning and 10 mg. at 12 o'clock
8. The childs behaviour is observed by staff and in the hospitals school
9. The treatment is discontinued if intolerable side-effects are observed or by no effect at all
10. The treatment continues for 6 weeks for observation if the effect is dubious, the child is discharged after 1 to 2 weeks
11. The child is discharged after 1 to 2 weeks if a positive effect is observed
12. The parents fill in the rating scale of the childs behaviour at discharge

## Effect :

Parents report significant good effect in 30  
1 stopped because of lack of effect  
Information is uncertain in 1

## Side-effects :

Tolerable side-effects were reported in 16.

## Epilepsy:

- 14 Idiopathic generalized epilepsy
- 1 Epilepsy with eyelid myoclonia
- 1 Epilepsy with myoclonic absences
- 1 Progressive myoclonus epilepsy
- 2 Encephalopathy with CSWS
- 2 Symptomatic multifocal epilepsy
- 5 Symptomatic focal epilepsy
- 2 BECTS
- 3 Benign occipital lobe epilepsy of childhood
- 1 Unclassified

## Antiepileptic drugs:

- 15 Monotherapy
  - 10 2 drugs
  - 3 3 drugs
  - 1 4 drugs
  - 3 no antiepileptic treatment
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- 2 ESM, 1TPM, 5 LEV, 11LTG, 19VPA, 3CBZ
  - 1 OXB, 1 CZP, 1CLB, 2 STM, 1 Prednisolone

**Conclusion:** Treatment with centralstimulants in children with epilepsy with ADHD/ADD, with or without concomittant antiepileptic treatment is safe in relation to seizure frequency and valuable in relation to the childrens function in daily life.