

### Cerebellar Mutism Syndrome

Dr FK Aarsen,
Clinical Neuropsychologist
Department Paediatric Neurology
Center for Lysosomal and Metabolic Diseases



# **Key symptoms of CMS (PFS/MSD)**

- Delayed onset 2-7 days
- Mutism and subsequent dysarthria (MSD) or reduced speech
- Bizarre emotional and behavioural deficits
  - depressed affect, apathy
  - Wining, irritability, and agitation
  - Emotional lability
- (progression of) limb paresis / ataxia/
- Decreased initiation of voluntary movements
  - Oropharyngeal dyspraxia
- Urinary/ faecal incontinence



## The classic clinical picture

- M.: 5 year old boy
- Resection of a large midline tumor: medulloblastoma
- Mild preoperative hydrocephalus



## The classic clinical picture: M. 5 years old

#### **Preoperative**

1. counting 1-20

#### **Postoperative:**

7 days: emotional lability when forced to imitate or speak

1 day after speech onset: First dysarthric words:

Mama

#### 8 days after speech onset

appelmoes= applesauce
vla met pillen=custard with pills
vlees= meat



# Dysarthria diminishes but rarely completely disappears

M: counting to 20 and repeating letters

2.6 years after resection of cerebellar pilocytic astrocytoma

CMS duration 3 months.

Voice tremor

Slow speech rate

**Articulation problems** 



## **Key symptom: MSD or Reduced speech**

- N: 11 years old:
- Reduced speech and inhibited behaviour

Erasmus MC z afung

**Key symptom: whining** 

Erasmus MC

**Key symptom: compulsory laughing** 



# **Key symptom: Oropharyngeal dyspraxia**

- J: 5 years
- 4 weeks after surgery

Erasmus MC z afung

Rare symptom: eyelid dyspraxia



# Late sequelae of CMS fit in the spectrum of CCAS.

Cerebellar Cognitive affective syndrome

- 4 major symptoms
- 1 Disturbances of executive function
- 2 Impaired spatial cognition
- 3 Linguistic difficulties
- 4 Personality change



# Thank you for your attention

