

**Conclusion:** Although these studies are suggestive of clear improvement with hormonal treatment compared to vigabatrin, there is currently a multicentre randomised parallel group study (ICISS; International Collaborative Infantile Spasm Study) which is comparing hormonal and vigabatrin together with hormonal treatment only which will hopefully further clarify the role of hormonal treatment in West syndrome.

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### MORTALITY AND CAUSES OF DEATH IN CHILDREN REFERRED TO A TERTIARY REFERRAL EPILEPSY CENTER

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**Purpose:** To describe causes of death in children with difficult to treat epilepsy.

**Method:** 3030 children aged 1 month to 18 years were referred to admission or outpatient visit to Dianalund Epilepsy Center from 1/1 99 to 31/8 2008. From the Danish registers it was found that among these children 43 had died (1,42 %). Case records and death certificates were evaluated.

**Results:** The largest group were children with a progressive neurometabolic disease (n=10, 23%). In 6 of these cases the cause of death were respiratory and one status epilepticus. 9 cases (21 %) died from SUDEP, autopsy were performed in 5, 4 were normal developed. One child were 2½ year, one 8 year and one 12 year the rest were from 14 to 24 year old. The remaining 24 children died from various reasons: pneumonia (8 cases), abdominal surgical disorders (5 cases), status epilepticus (2 cases) and others. No cases of drowning were found but some cases might have been related to seizures like aspiration or suffocation. All of these 24 children except one had delayed development.

**Conclusion:** SUDEP in young children is rare even in cases with difficult to treat epilepsy. Children with progressive metabolic disorders was the largest group in this cohort.

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### INFLUENCE OF IQ/DQ ON OUTCOME IN CHILDHOOD EPILEPSY SURGERY

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**Purpose:** Operations of children with intellectual disabilities have been questioned by some because of suspicion of a poor outcome.

**Methods/material:** Retrospective study of all Danish children (n=65) operated between 1996 and 2007. 25 children had an IQ/DQ above 70 (group A) and 40 had IQ/DQ of 70 or below (group B). Mean age at operation in group A were 13 years and in group B 9 years and 1 month. In group A the majority (17) were operated in Denmark, and in group B the majority (16) were operated abroad mainly Cleveland Clinic, USA. In group A 4 had hemispherectomy or multiple lobe resection whereas in group B 19 children had this kind of operation.

**Results:** Seizure free outcome (Engel 1 A or B) were found in 68,0% (group A) and 67,5% (group B) at one year follow up. In group A 27,3% had an increase and 18,2% a decrease of 10 IQ/DQ or more compared to 10,0% and 14,0% in group B one year after the operation.

Behavioural changes (mood, aggression) were registered by the parents at a visit 6-8 weeks after the operation. In group A 45% of the parents reported an improved situation, compared to 34% in group B. Only 10% of the parents in group A reported an improved "attention and energy" compared to 47% in group B.

**Conclusion:** Seizures and developmental outcome after epilepsy surgery did not differ in a Danish cohort comparing children with intellectual disabilities with normal children.