Corticosteroids or clobazam for ESES syndrome: a European, multicenter, randomized, controlled clinical trial

Published: 11-12-2013
Last updated: 24-04-2024

To compare the effect on cognition of treatment with clobazam or corticosteroids.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Seizures (incl subtypes)
Study type	Interventional

Summary

ID

NL-OMON55462

Source
ToetsingOnline

Brief title
RESCUE ESES

Condition

- Seizures (incl subtypes)

Synonym
Electrical Status Epilepticus in Sleep (ESES), epilepsy in sleep

Research involving
Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Utrecht
Source(s) of monetary or material Support: Nationaal Epilepsie Fonds en WKZ onderzoeksfonds

Intervention

Keyword: clobazam, corticosteroids, epilepsy, ESES

Outcome measures

Primary outcome

- Intelligence quotient, or developmental quotient

- Cognitive sumscore

Improvement is defined as significant when improved by at least 75% of the

standard deviation.

Secondary outcome

- Individual absolute test results, and IQ scores;

- Spike wave index during non-REM sleep. Improvement is defined as a rdecrease

to less than

25%;

- Seizure frequency. Improvement is defined as a reduction of 50% or more as

compared with

baseline;

- Global improvement of functioning assessed with a VAS score (-5 to 5)

- Safety and tolerability, as assessed by the occurrence of serious

adverse events;

- Differences in pro-inflammatory cytokine levels in patients with ESES

who respond to either treatment strategies compared to nonresponders.

Secondary outcomes will be evaluated after 6 and 18 months.

Study description

Background summary

Epileptic encephalopathy with ESES is a rare pediatric epilepsy syndrome with abundant interictal epileptiform discharges in sleep and impairment of cognition or behavior. ESES resolves spontaneously in puberty but cognitive dysfunction often remains, especially when untreated. Treatment with conventional anti-epileptic drugs yields limited effects. Observational data have suggested that clobazam and corticosteroid treatment may be beneficial. Evidence from randomized controlled trials (RCT) to prove efficacy of both treatment options, or superiority of one over the other, is still lacking and mandatory.

Study objective

To compare the effect on cognition of treatment with clobazam or corticosteroids.

Study design

This is a European randomized open clinical trial in 130 patients with recent onset epileptic encephalopathy with ESES, to compare the effects of corticosteroid versus clobazam on cognition. Clobazam treatment will be increased to 0.5-1.2 mg/kg/day if tolerated. Corticosteroids will be given either intravenously (pulsed methylprednisolone 20 mg/kg/day for 3 days, once monthly) or orally (prednisolone 2 mg/kg/day for one month, followed by tapering in 20 weeks).

Intervention

Treatment with clobazam or corticosteroids.

Study burden and risks

The treatments and investigations that are given / performed in the setting of this study are part of standard clinical patient care, with the exception of cytokine profiling and detection of auto-antibodies. Blood withdrawal for cytokine profiling and detection of auto-antibodies will be combined with blood withdrawal for standard patient care as much as possible. Therefore we suggest that the burden and risks associated with participation in this study are not increased. Patients may benefit from the well-defined protocolized patient care that is implemented in this study (while there are no clear guidelines for standard clinical patient care in ESES patients outside of this study) and the patient group of ESES patients may benefit from an evidence based treatment

regimen that can result from this study.

Contacts

Public
Universitair Medisch Centrum Utrecht

Lundlaan 6
Utrecht 3584 AE
NL
Scientific
Universitair Medisch Centrum Utrecht

Lundlaan 6
Utrecht 3584 AE
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Children (2-11 years)

Inclusion criteria

*Age 2 to 12 years
*A diagnosis within six months prior to study inclusion (preferentially as soon as possible) of either typical or atypical ESES syndrome (as defined in study protocol)
*No previous treatment with either clobazam or corticosteroids
*No current treatment with carbamazepine, oxcarbazepine, vigabatrin, tiagabine, gabapentin and pregabalin and no treatment with any of these drugs in the previous three months;
*Written informed consent by parents / legal representatives.

Exclusion criteria

*Patients with a spike wave index during wakefulness of > 50%
*Any condition that, in the investigator*s judgement, contraindicates the use of clobazam or corticosteroids.

Study design

Design

Study type:	Interventional
Intervention model:	Other
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	22-07-2014
Enrollment:	20
Type:	Actual

Medical products/devices used

Product type:	Medicine
Brand name:	Frisium
Generic name:	Clobazam
Registration:	Yes - NL intended use
Product type:	Medicine
Brand name:	prednisolone
Generic name:	prednisolone
Registration:	Yes - NL outside intended use
Product type:	Medicine

Brand name:	Solu-Medrol
Generic name:	methylprednisolone
Registration:	Yes - NL outside intended use
Product type:	Medicine
Brand name:	Tapclob
Generic name:	Clobazam

Ethics review

Approved WMO Date:	11-12-2013
Application type:	First submission
Review commission:	METC NedMec
Approved WMO Date:	11-02-2014
Application type:	First submission
Review commission:	METC NedMec
Approved WMO Date:	28-01-2016
Application type:	Amendment
Review commission:	METC NedMec
Approved WMO Date:	01-03-2016
Application type:	Amendment
Review commission:	METC NedMec
Approved WMO Date:	22-02-2018
Application type:	Amendment
Review commission:	METC NedMec
Approved WMO Date:	27-02-2018
Application type:	Amendment
Review commission:	METC NedMec
Approved WMO Date:	11-02-2021

Application type:	Amendment
Review commission:	METC NedMec

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
EudraCT	EUCTR2013-000531-27-NL
ISRCTN	ISRCTN42686094
CCMO	NL43510.041.13