



From our Co-ordinating Editor

2006 was a good year for The Cochrane Epilepsy Group that saw five new systematic reviews and five new protocols published. We also had 14 potential new reviews registered. 2007 looks a very promising year for our group and we look forward to seeing these systematic reviews progress to publication.

At the Editorial base we are anxious to help facilitate reviews in any way that we can. This includes literature searching, providing methodological and statistical support. We are also happy to help organise brief sabbaticals at the editorial base here in Liverpool for those that need a little space and fewer distractions to help them complete their reviews.

So, if you are keen to take on a review, or require any assistance or guidance, please do not hesitate to contact either myself (a.g.marson@liv.ac.uk) or Rachael (r.jowett@liv.ac.uk).

Tony Marson
Co-ordinating Editor

Reviews Update

In Issue 1, 2007 of *The Cochrane Library* the Epilepsy Group published three new reviews, and the abstracts are reproduced below. The full reviews can be found on *The Cochrane Library* (www.thecochranelibrary.com). A list of all reviews managed by our Group, plus registered titles, appears on pages 3-5 of this newsletter.

Corticosteroids including ACTH for childhood epilepsy other than epileptic spasms *Neti Gayatri, Colin Ferrie & Helen Cross*

Background

Epilepsy is a disorder with recurrent epileptic seizures. Corticosteroids have been used in the treatment of children with epilepsy and have significant adverse effects. Their efficacy and tolerability have not been clearly established.

Objectives

To determine the efficacy of corticosteroids in terms of seizure control, improvements in cognition and in quality of life and tolerability of steroids compared to placebo or other antiepileptic drugs.

Search strategy

We searched the following databases: The Cochrane Epilepsy Group Specialized Register (September 2006); Cochrane Central Register of

Controlled Trials (CENTRAL)(The Cochrane Library Issue 2, 2006); MEDLINE (1966 - April 2004); EMBASE (1966 - December 2004); Database of Abstracts of Reviews of Effectiveness (DARE) (December 2004).

We checked the reference lists of retrieved studies for additional reports of relevant studies.

Selection criteria

All randomized controlled trials of administration of corticosteroids to children (less than 16 years) with epilepsy.

Data collection and analysis

Three review authors independently selected trials for inclusion and extracted data. Outcomes included cessation of seizures, reduction in seizure frequency, improvement in cognition, quality of life and adverse effects of steroids.

Main results

A single RCT was included that recruited five patients in double blind crossover trial. One was withdrawn prematurely from the study and another had infantile spasms and hence was excluded from further analysis. ACTH 4-9 was administered. The overall reduction in seizure frequency of more than 25% and less than 50% occurred in one child at low dose and in two children at higher dose. One child did not show

any reduction in seizure frequency. No adverse effects were reported.

Authors' conclusions

No evidence was found for the efficacy or safety of corticosteroids in treating childhood epilepsies. Clinicians using steroids in childhood epilepsies, other than for epileptic spasms, should take this into account before using these agents.

Therapeutic monitoring of antiepileptic drugs for epilepsy

Torbjorn Tomson, Marja-Liisa Dahl & Elin Kimland

Background

The aim of drug treatment for epilepsy is to prevent seizures without causing adverse effects. To achieve this, drug dosages need to be individualised. Measuring antiepileptic drug levels in body fluids (therapeutic drug monitoring) is frequently used to optimise drug dosage for individual patients.

Objectives

To review the evidence regarding the effects of therapeutic drug monitoring upon outcomes in epilepsy.

Search strategy

We searched the Cochrane Epilepsy Group Specialised Register (September 2006), the Cochrane Central Register of Controlled Trials (CENTRAL) (*The Cochrane Library 2005*, Issue 4), MEDLINE (January 1966 to April 2005) and EMBASE (1974 to May 2005). No language restrictions were imposed. We checked the reference lists of retrieved articles for additional reports of relevant studies.

Selection criteria

Randomised controlled trials comparing the outcomes of antiepileptic drug monotherapy guided by therapeutic drug monitoring with drug treatment without the aid of therapeutic drug monitoring.

Data collection and analysis

We based this review on published aggregate data. The main outcomes measured were the proportions of patients achieving a 12-month remission from seizures, reporting adverse effects, and being withdrawn from the treatment they had been randomised to receive.

Main results

Only one study met the inclusion criteria for the review. In this open study, 180 patients with newly-diagnosed, untreated epilepsy were randomised to treatment with the antiepileptic drug selected by their physician either with or without therapeutic drug serum level monitoring as an aid to dosage adjustments. The antiepileptic drugs used were carbamazepine, valproate, phenytoin, phenobarbital and primidone. A 12-month remission from seizures was achieved by 60% of the patients randomised to therapeutic drug monitoring (intervention group) and by 61% in the control group. A total of 56% in the intervention group and 58% in the control group were seizure free during the last 12 months of follow up. Adverse effects were reported by 48% in the intervention group and 47% of the control group patients. Of those randomised to therapeutic drug monitoring, 62% completed the two-year follow up compared with 67% of the control group.

Authors' conclusions

We found no clear evidence to support routine antiepileptic drug serum concentration measurement with the aim of reaching predefined target ranges for the optimisation of treatment of patients with newly-diagnosed epilepsy with antiepileptic drug monotherapy. However, this does not exclude the possible usefulness of therapeutic drug monitoring of specific antiepileptic drugs during polytherapy, in special situations or in selected patients, although evidence is lacking.

Treatments for non-epileptic attack disorder

Jane Brooks, Gus Baker, Laura Goodfellow, Nynke Bodde & Albert Aldenkamp

Background

Psychogenic non-epileptic seizures (NES) have the outward appearance of epilepsy in the absence of physiological or electroencephalographic correlates. Non-epileptic seizures can occur in isolation or in combination with epileptic seizures. The development and maintenance of non-epileptic seizures has been well documented and there is a growing literature on the treatment of NES which includes non-psychological (including anti-anxiety and antidepressant pharmacological treatment) and psychological therapies (including cognitive behavioural therapy (CBT), hypnotherapy and paradoxical therapy). Various treatment methodologies have been tried with variable success. The purpose of this Cochrane review was to establish the evidence base for the treatment of NES.

Objectives

To assess whether treatments for NES result in a reduction in frequency of seizures and/or improvement in quality of life, and whether any treatment is significantly more effective than others.

Search strategy

We searched the Cochrane Epilepsy Group's Specialised Register (September 2005), the Cochrane Central Register of Controlled Trials (CENTRAL) (*The Cochrane Library* Issue 3, 2005), MEDLINE (1966 to July 2005), and PsycINFO (1806 to July 2005). No language restrictions were imposed. We checked the

reference lists of retrieved studies for additional reports of relevant studies

Selection criteria

Randomised or quasi-randomised studies were included that assessed one or more types of psychological or non-psychological interventions for the treatment of NES. Studies of childhood NES were excluded from our review.

Data collection and analysis

Three review authors independently assessed the trials for inclusion and extracted data. Outcomes included reduction in seizure frequency and improvements in quality of life.

Main results

Three small studies met our inclusion criteria and were of poor methodological quality. Two assessed hypnosis and the other paradoxical therapy. There were no detailed reports of improved seizure frequency or quality of life outcomes, and these trials provide no reliable evidence of a beneficial effect of these interventions.

Authors' conclusions

In view of the methodological limitations and the small number of studies, we have no reliable evidence to support the use of any treatment including hypnosis or paradoxical injunction therapy in the treatment of NES. Randomised studies of these and other interventions are needed.

Our full list of reviews, protocols and registered titles

Reviews

- ◆ Acupuncture for epilepsy. *Cheuk DKL, Wong V.*
- ◆ Anticonvulsant therapy for status epilepticus. *Prasad K, Al-Roomi K, Sequeira R.*
- ◆ Antidepressant drugs for narcolepsy. *Vignatelli L, D'Alessandro R, Candelise L.*
- ◆ Antiepileptic drugs for the primary secondary prevention of seizures after intracranial venous thrombosis. *Kwan J, Kinton L, Hand P.*
- ◆ Calcium antagonists as an add-on therapy for drug-resistant epilepsy. *Chaisewikul R, Baillie N, Marson AG.*

- ◆ Carbamazepine versus phenobarbitone monotherapy for epilepsy. *Tudur Smith C, Marson AG, Williamson PR, Hutton JL, Chadwick DW.*
- ◆ Carbamazepine versus phenytoin monotherapy for epilepsy. *Tudur Smith C, Marson AG, Williamson PR, Hutton JL, Chadwick DW.*
- ◆ Carbamazepine versus valproate monotherapy for epilepsy. *Marson AG, Williamson PR, Hutton JL, Clough HE, Chadwick DW; on behalf of epilepsy monotherapy trialists.*
- ◆ Common antiepileptic drugs in pregnancy in women with epilepsy. *Adab N, Winterbottom J, Tudur Smith C, Williamson PR.*
- ◆ Corticosteroids including ACTH for childhood epilepsy other than epileptic spasms. *Ferrie C, Cross H.*
- ◆ Drug management for acute tonic-clonic convulsions including convulsive status epilepticus in children. *Appleton RE, Martland T, Phillips B.*
- ◆ Early versus late withdrawal of antiepileptic drug for people with epilepsy in remission. *Sirven JI, Sperling D, Wingerchuk DM.*
- ◆ Epilepsy clinics versus general neurology or medical clinics. *Bradley P, Lindsay B.*
- ◆ Ethosuximide, sodium valproate or lamotrigine for typical absence seizures of childhood and adolescence. *Posner EB, Mohamed K.*
- ◆ Gabapentin add-on for drug-resistant partial epilepsy. *Marson AG, Kadir ZA, Hutton JL, Chadwick DW.*
- ◆ Ketogenic diet for epilepsy. *Levy R, Cooper P.*
- ◆ Lamotrigine add-on for drug-resistant partial epilepsy. *Ramaratnam S, Marson AG, Baker GA.*
- ◆ Lamotrigine versus carbamazepine monotherapy for epilepsy. *Preston C, Marson AG, Williamson PR, Hutton JL, Chadwick DW, Marshall A.*
- ◆ Levetiracetam add-on for drug-resistant localization related (partial) epilepsy. *Chaisewikul R, Privitera MD, Hutton JL, Marson AG.*
- ◆ Oxcarbazepine add-on for drug-resistant partial related epilepsy. *Castillo S, Schmidt DB, White S.*
- ◆ Oxcarbazepine versus phenytoin monotherapy for epilepsy. *Muller M, Williamson PR, Marson AG.*
- ◆ Phenobarbitone versus phenytoin monotherapy for epilepsy. *Taylor S, Williamson PR, Marson AG, Hutton JL, Chadwick DW.*
- ◆ Phenytoin versus valproate monotherapy for epilepsy. *Tudur Smith C, Ramaratnam S, Marson AG, Williamson PR, Hutton JL, Chadwick DW.*
- ◆ Psychological treatments for epilepsy. *Ramaratnam S, Baker GA, Goldstein L.*
- ◆ Rapid versus slow withdrawal of antiepileptic drugs. *Ranganathan LN, Ramaratnam S.*
- ◆ Remacemide add-on for drug-resistant partial epilepsy. *Leach JP, Marson AG*
- ◆ Self-management education for adults with epilepsy. *Shaw B, Stokes T., Camosso-Stefinovic J, Baker R, Baker G, Jacoby A.*
- ◆ Self-management education for children with epilepsy. *Stokes T, Shaw B, Camosso-Stefinovic J, Baker R, Baker G, Jacoby A.*
- ◆ Specialist epilepsy nurses for treating epilepsy. *Bradley P, Lindsay B.*
- ◆ Tiagabine add-on for drug-resistant partial epilepsy. *Pereira J, Marson AG.*
- ◆ Topiramate add-on for drug-resistant partial epilepsy. *Jette NJ, Marson AG, Kadir ZA, Hutton JL.*
- ◆ Treatments for non-epileptic attack disorder. *Brooks J, Baker GA, Goodfellow L, Bodde N, Aldenkamp A.*
- ◆ Treatment of Lennox-Gastaut syndrome. *Hancock E, Cross H.*
- ◆ Treatment of infantile spasms. *Hancock E, Osborne J, Milner P.*
- ◆ Vagus nerve stimulation for partial seizures. *Privitera MD, Welty TE, Ficker DM, Welge J.*

- ◆ Vitamins for epilepsy. *Ranganathan L, Ramaratnam S.*
- ◆ Yoga for epilepsy. *Ramaratnam S, Sridharan K.*
- ◆ Zonisamide add-on for drug-resistant partial epilepsy. *Chadwick DW, Marson AG.*

Protocols

- ◆ Antiepileptic drugs for preventing postcraniotomy seizures. *Cantisani I, Celani MG.*
- ◆ Antiepileptic drugs for preventing seizures in people with brain tumors. *Tremonts-Lukas IW, Armstrong T, Gilbert MR.*
- ◆ Antiepileptic drugs for the primary and secondary prevention of seizures after stroke. *Kwan J, Hand P, Kinton J.*
- ◆ Antiepileptic drugs for the primary secondary prevention of seizures after subarachnoid haemorrhage. *Kwan J, Roberts H, Gray W.*
- ◆ Generic versus non generic prescribing for epilepsy. *Dergalust S, Shekelle P.*
- ◆ Interventions for psychotic symptoms concomitant with epilepsy. *Farooq S.*
- ◆ Non-pharmacological interventions for epilepsy in people with intellectual disabilities. *Kerr M, Beavis J, Marson A.*
- ◆ Oxcarbazepine versus carbamazepine monotherapy for partial onset seizures. *Koch M, Polman S.*
- ◆ Pharmacological interventions for epilepsy in people with intellectual disabilities. *Kerr M, Beavis J, Marson A.*
- ◆ Pharmacotherapy for preventing and treating alcohol withdrawal seizures. *Leone MA, Brathen G, Chick J, Faggiano F, Hilbom M, McIntosh C.*
- ◆ Preconceptual counselling for women with epilepsy to reduce adverse pregnancy outcome. *Winterbottom JB, Baker GA, Jacoby A, Smyth R.*
- ◆ Pregabalin add-on for drug-resistant partial epilepsy. *Lozsadi D.*
- ◆ Prophylactic drug management of febrile convulsions in children. *Offringa M, Newton R.*
- ◆ Specialist care for epilepsy and non-epileptic seizures in adults. *Bradley P, Lindsay B.*
- ◆ Specialist care for epilepsy and non-epileptic seizures in children. *Bradley P, Lindsay B.*
- ◆ Stimulant drugs for narcolepsy in adults. *Vignatelli L, Rinaldi R, Lombardi C, Albani F, Plazzi G, D'Alessandro R*
- ◆ Traditional Chinese medicine for epilepsy. *Li Q, Zhou D, He L, Chen X.*
- ◆ Treatment for first epileptic seizure. *Beghi E, Marson AG.*
- ◆ Treatment for Kleine-Levin syndrome. *Oliveira M, Conti C, Fernandes do Prado G, Saconato H.*
- ◆ Zonisamide monotherapy for epilepsy. *Ranganathan LN, Ramaratnam S.*

Registered Titles

- ◆ Anticonvulsant therapy for epilepsy in people with hydrocephalus. *Yutthakasemsunt S, Kanjanavera A, Kithuandee A, Kittiwattanagul W, Pijavechvrit P*
- ◆ Antidepressants for people with epilepsy and depression. *MacDonald B, Hacoheh Y.*
- ◆ Antiepileptic drugs versus no treatment or placebo for children with benign rolandic epilepsy with centro temporal spikes. *de Goede C, West S, Gupta R*
- ◆ Clonazepam add-on therapy for refractory epilepsy. *Johnson R.*
- ◆ Deep brain stimulation for epilepsy. *Pawlas N.*
- ◆ Functional MRI as a diagnostic investigation for the presurgical evaluation of people with epilepsy. *Huang Z.*
- ◆ Gabapentin monotherapy for epilepsy. *Subramanian E.*
- ◆ Levetiracetam monotherapy for epilepsy. *Chandatre S.*

- ◆ Magnetic resonance spectroscopy versus electroencephalography for seizure localization in people with epilepsy. *Chen Z, Zhou L, Zhou J, Zhao C, Cao D.*
- ◆ Magnetoencephalography versus electroencephalography for seizure localization in people with epilepsy. *Huang Z.*
- ◆ Melatonin for epilepsy. *Del Felice A, Guaraldi P.*
- ◆ Prophylactic antiepileptic drugs for post-traumatic epilepsy. *Agrawal D.*
- ◆ Stiripentol add-on for refractory epilepsy. *Gowda V.*
- ◆ Strategies for improving adherence to treatment in people with epilepsy. *Losada-Camacho M.*
- ◆ Sub-pial transections for epilepsy. *Marappan K.*
- ◆ The effects of anaesthetic agents on cortical mapping for neurosurgical procedures. *Adhikary SD, Babu SK, Tharyan P, Venkatesan T.*
- ◆ Topiramate versus carbamazepine monotherapy for epilepsy. *Chen Z, Zhou L, Zhou J, Zhao C, Cao D.*
- ◆ Transcranial magnetic stimulation for the treatment of epilepsy. *Demirtas-Tatlidede A, Alonso M.*
- ◆ Treatments for myoclonic seizures. *Cooper-Makhorn D, Feely M.*

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Would you be interested in writing a Cochrane review?

We have identified the following titles for reviews. If you would like to discuss the possibility of carrying out one of these reviews, or if you have an idea for a title that is not listed here, please contact Rachael Jowett (r.jowett@liv.ac.uk or at the address at the end of this newsletter).

- ◆ Adverse events scales
- ◆ Cannibidol for epilepsy
- ◆ Cerebellar stimulation for epilepsy
- ◆ Clonazepam add-on therapy for refractory epilepsy
- ◆ Clonazepam monotherapy for epilepsy
- ◆ Diazepam add-on therapy for refractory epilepsy
- ◆ Diazepam monotherapy for epilepsy
- ◆ Felbamate add-on therapy for refractory epilepsy
- ◆ Hormonal treatments for catamenial epilepsy
- ◆ Interventions to improve the memory of people with epilepsy
- ◆ Intravenous immunoglobulins for epilepsy
- ◆ Joint neurology obstetric clinics
- ◆ Oral vitamin K in late pregnancy for women with epilepsy
- ◆ Progabide add-on for refractory epilepsy
- ◆ Rufinamide add-on for refractory epilepsy
- ◆ Sulthiame add-on therapy for refractory epilepsy
- ◆ Sulthiame monotherapy for epilepsy
- ◆ Treatments for peri-menstrual seizures
- ◆ Treatments for the idiopathic occipital lobe epilepsies
- ◆ Vitamin K for pregnant women with epilepsy

XV Cochrane Colloquium

This year's Colloquium will be hosted by the Brazilian Cochrane Centre and will take place in **São Paulo** from **23 to 27 October**. The theme will be 'Evidence based health care for all', and the objectives of the Colloquium are:

- to introduce the Cochrane Collaboration and its achievements to those interested in using the best available evidence to inform healthcare decision making;
- to provide members of the collaboration with opportunities to hold meetings and to advance their knowledge and skills;
- to encourage partnerships among clinicians, researchers, consumers, policy makers and funders committed to advancing evidence-based practice;
- to provide opportunities for members of the collaboration to get together at social cultural and recreational events;
- to provide a forum where members of the Collaboration can contribute to the future directions of the organization

For more information about the Colloquium and how to register, please go to:
<http://www.colloquium.info/>



Cochrane Training Workshops 2007

Cochrane centres provide opportunities for face-to-face training and dates are listed below. If you would like to attend any of these workshops, or for more details, please contact Rachael Jowett at

the editorial base.

Australasian Cochrane Centre

Date	Location	Type of workshop
12 March	Auckland	Developing a protocol for a systematic review
13 March	Auckland	Introduction to Analysis
26-28 March	Sydney	Updating a Cochrane Systematic Review
19-20 April	Singapore	How to conduct a Cochrane Systematic Review
31 May	Adelaide	Developing a protocol for a systematic review
1 June	Adelaide	Introduction to Analysis
14 July	Brisbane	Developing a protocol for a systematic review
23 July	Hobart	Developing a protocol for a systematic review
24 July	Hobart	Introduction to Analysis
26 July	Sydney	Developing a protocol for a systematic review
27 July	Sydney	Introduction to Analysis
22 August	Melbourne	Developing a protocol for a systematic review
23 August	Melbourne	Introduction to Analysis
28-29 August	Melbourne	Updating a Cochrane Systematic Review
25-26 September	Melbourne	How to conduct a Cochrane Systematic Review
27-28 September	Manila	Review Completion Workshop
19-23 November	Melbourne	Review Completion and Update Program
5 December	Sydney	Developing a protocol for a systematic review
6 December	Sydney	Introduction to Analysis
7 December	Sydney	Intro to new Cochrane Handbook Methods and RevMan 5 (½ day)

Dutch Cochrane Centre

Date	Location	Type of workshop
8 March	Amsterdam	Ontwikkelen van een systematische review
4 June	Amsterdam	Ontwikkelen van een systematische review

Nordic Cochrane Centre

Date	Location	Type of workshop
23 April	Copenhagen	Protocol workshop
4-8 June	Hankø	How to practice Evidence Based Health Care
8 October	Copenhagen	Protocol workshop
9 October	Copenhagen	RevMan workshop

UK & Ireland

Date	Location	Type of workshop
28 March	Oxford	Developing a protocol for a review
29 March	Oxford	Introduction to Analysis
22 May	Dublin	Developing a protocol for a review
23 May	Dublin	Introduction to Analysis
5 June	Bath	Developing a protocol for a review
6 June	Bath	Introduction to Analysis
17 July	York	Developing a protocol for a review
18 July	York	Introduction to Analysis
2 October	Belfast	Developing a protocol for a review
4 October	Belfast	Introduction to Analysis
11 December	Liverpool	Developing a protocol for a review
12 December	Liverpool	Introduction to Analysis

If you are unable to attend these workshops you might like to access the open learning materials for review authors at: www.cochrane-net.org/openlearning/

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- Preparation of systematic reviews
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- Peer refereeing protocols/reviews
- Searching non-English journals - *please specify language:*
- Translating* non-English journals - *please specify language:*
- Consumer perspectives

** This does not usually mean a full translation of a report, but providing us with a summary of the main points.*

Please return the completed form to:

Alison Beamond, Cochrane Epilepsy Group, University Division of Neuroscience,
Clinical Sciences Centre for Research & Education, Lower Lane, Liverpool, L9 7LJ, UK.