Abstract:

BACKGROUND: Many people with schizophrenia do not achieve a satisfactory treatment response with ordinary antipsychotic drug treatment and various additional medications are used to promote additional response. The antiepileptic carbamazepine is one such drug. OBJECTIVES: To review the effects of carbamazepine and its derivatives for the treatment of schizophrenia and schizoaffective psychoses. SEARCH STRATEGY: We searched Biological Abstracts (1980-2001), The Cochrane Library (Issue 3, 2001), The Cochrane Schizophrenia Group’s Register of Trials (December 2001), EMBASE (1980-2001), MEDLINE (1966-2001), PsycLIT (1886-2001) and PSYNDEX (1974-2001). Citations from included trials were also inspected and relevant companies and authors contacted for additional data. SELECTION CRITERIA: All randomised controlled trials comparing carbamazepine or compounds of the carbamazepine family to placebo or no intervention, whether as sole treatment or as an adjunct to antipsychotic medication for the treatment of schizophrenia and/or schizoaffective psychoses. DATA COLLECTION AND ANALYSIS: Citations and, where possible, abstracts were independently inspected by reviewers, papers ordered, re-inspected and quality assessed. Data were extracted independently by at least two reviewers. Dichotomous data were analysed using Peto odds ratio (OR) and the 95% confidence interval (CI) estimated. Where possible the number
needed to treat (NNT) or number needed to harm statistics were calculated. MAIN RESULTS: Ten studies with a total of 258 participants were included. One study comparing carbamazepine with placebo as the sole treatment for schizophrenia (n=31) was stopped early due to high relapse rate. No effect of carbamazepine was evident (OR relapse 1.5 CI 0.2 to 9.7). Another study (n=38) compared carbamazepine with antipsychotics as the sole treatment for schizophrenia. No differences in terms of mental state were found (OR 50% BPRS reduction 1.9 CI 0.5 to 7.2). More people who received the antipsychotic (perphenazine) had parkinsonism (OR 0.03 CI 0.01 to 0.1, NNH 1 CI 0.9 to 1.4). Eight studies compared adjunctive carbamazepine plus antipsychotics versus placebo plus antipsychotics. Adding carbamazepine was as acceptable as adding placebo (n=182, OR leaving the study early 0.4 CI 0.1 to 1.4). Carbamazepine augmentation of antipsychotics was superior compared with antipsychotics alone, but participant numbers were low (n=38, OR 0.1 CI 0.02 to 0.4, NNT 2 CI 1 to 5). There were no differences for mental state outcomes (6 RCTs, n=147, OR 50% BPRS reduction 0.99 CI 0.2 to 6.0). Less people in the carbamazepine augmentation group had movement disorders than those taking haloperidol alone (1 RCT, n=20, OR 0.15 CI 0.03 to 0.8). The effects of carbamazepine on subgroups of people with schizophrenia and aggressive behaviour, negative symptoms or EEG abnormalities or with schizoaffective disorder are unknown. REVIEWER'S CONCLUSIONS: Based on currently available evidence from randomised trials, carbamazepine cannot be recommend for routine clinical use for sole treatment, or augmentation of antipsychotic treatment, of schizophrenia. Large, simple well-designed and reported trials are justified especially if focusing on those with violent episodes and people with schizoaffective disorders or on those with both schizophrenia and EEG abnormalities.