Quetiapine versus other atypical antipsychotics for schizophrenia.

Abstract:
In many countries of the industrialised world second generation ('atypical') antipsychotic drugs have become the first line drug treatment for people with schizophrenia. It is not clear how the effects of the various second generation antipsychotic drugs differ. To evaluate the effects of quetiapine compared with other second generation antipsychotic drugs for people with schizophrenia and schizophrenia-like psychosis. We searched the Cochrane Schizophrenia Group Trials Register (April 2007), inspected references of all identified studies, and contacted relevant pharmaceutical companies, drug approval agencies and authors of trials for additional information. We included all randomised control trials comparing oral quetiapine with oral forms of amisulpride, aripiprazole, clozapine, olanzapine, risperidone, sertindole, ziprasidone or zotepine in people with schizophrenia or schizophrenia-like psychosis. We extracted data independently. For dichotomous data we calculated relative risks (RR) and their 95% confidence intervals (CI) on an intention-to-treat basis based on a random-effects model. We calculated numbers needed to treat/harm (NNT/NNH) where appropriate. For continuous data, we calculated weighted mean differences (WMD) again based on a random-effects model. The review currently includes 21 randomised control trials (RCTs) with 4101 participants. These trials
provided data on four comparisons - quetiapine versus clozapine, olanzapine, risperidone or ziprasidone. A major limitation to all findings is the high number of participants leaving studies prematurely (57.6%) and the substantial risk of biases in studies. Efficacy data favoured olanzapine and risperidone compared with quetiapine (PANSS total score versus olanzapine: 10 RCTs, n=1449, WMD 3.66 CI 1.93 to 5.39; versus risperidone: 9 RCTs, n=1953, WMD 3.09 CI 1.01 to 5.16), but clinical meaning is unclear. There were no clear mental state differences when quetiapine was compared with clozapine or ziprasidone. Compared with olanzapine, quetiapine produced slightly fewer movement disorders (6 RCTs, n=1090, RR use of antiparkinson medication 0.49 CI 0.3 to 0.79, NNH 25 CI 14 to 100) and less weight gain (7 RCTs, n=1173, WMD -2.81 CI -4.38 to -1.24) and glucose elevation, but more QTc prolongation (3 RCTs, n=643, WMD 4.81 CI 0.34 to 9.28). Compared with risperidone, quetiapine induced slightly fewer movement disorders (6 RCTs, n=1715, RR use of antiparkinson medication 0.5 CI 0.3 to 0.86, NNH 20 CI 10 to 100), less prolactin increase (6 RCTs, n=1731, WMD -35.28 CI -44.36 to -26.19) and some related adverse effects, but more cholesterol increase (5 RCTs, n=1433, WMD 8.61 CI 4.66 to 12.56). Compared with ziprasidone, quetiapine induced slightly fewer extrapyramidal adverse effects (1 RCT, n=522, RR use of antiparkinson medication 0.43 CI 0.2 to 0.93, NNH not estimable) and prolactin increase. On the other hand quetiapine was more sedating and led to more weight gain (2 RCTs, n=754, RR 2.22 CI 1.35 to 3.63, NNH 13 CI 8 to 33) and cholesterol increase than ziprasidone. Best available evidence from trials suggests that most people who start quetiapine stop taking it within a few weeks. Comparisons with amisulpride, aripiprazole, sertindole and zotepine do not exist. Most data that has been reported within existing comparisons are of very limited value because of assumptions and biases within them. There is much scope for further research into the effects of this widely used drug.