Risperidone versus olanzapine for people with schizophrenia: a Cochrane systematic review

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Background

Risperidone and olanzapine are the most commonly used atypical antipsychotics for treating schizophrenia.

Objectives

To compare the clinical effects of risperidone and olanzapine for people with schizophrenia and schizophrenia-like psychoses.

Search strategy

- Cochrane Schizophrenia Group's Register (Sept 2005)
- References of all identified studies
- Janssen-Cilag Ltd and Eli Lilly & Co
- Authors of included studies

Criteria

Study methods

Randomised trials

Participants

People with schizophrenia or schizophrenia-like illnesses, diagnosed by any criteria

Interventions (oral form)

Risperidone any dose
Olanzapine any dose

Data collection & analysis

We independently inspected citations, extracted data and analysed within RevMan software.

We calculated relative risk (RR) (random effects model), 95% confidence interval (CI) and the number needed to treat (NNT) on an intention-to-treat basis.

Results 1.

- Initial search identified 870 citations
- 137 related to 16 relevant studies

Participants

Total – 1768
(Largest: CATIE 2005 – 673 people)
Sex: Majority were men
Age: Mean – late 30's to early 40's
Setting: Inpatient and outpatient

Interventions

Risperidone: 1.5 to 10 mg/day
Olanzapine: 5 to 30 mg/day

Results 2. Outcomes

Global outcomes: reported 7 different ways.

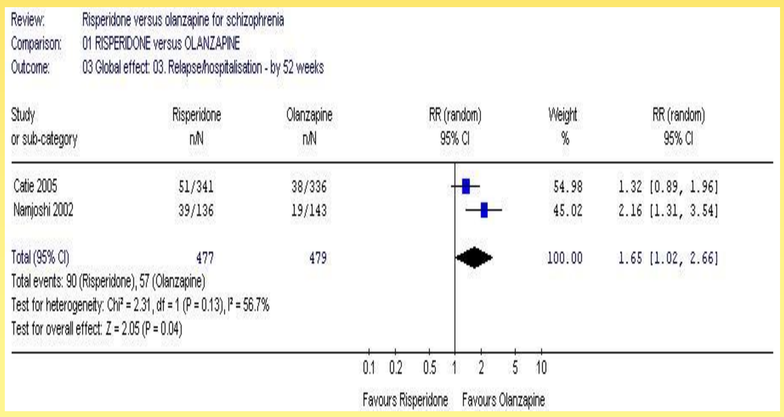
Mental state outcomes: reported 14 different ways (6 scales, different units used in different studies).

Death was reported in only three studies.

Enormous efforts are still invested in recording data that are so poorly reported as to render them uninformative and clinically meaningless.

Global outcomes: no difference for outcome of unchanged or worse across 12 weeks (n=548, 2 RCTs, RR 1.00 CI 0.88 to 1.15).

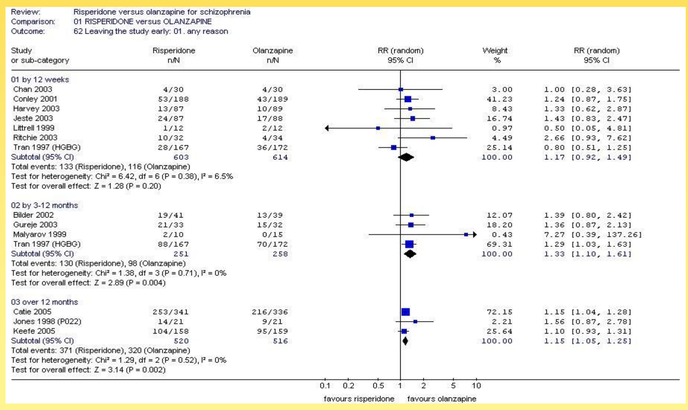
For the outcome of relapse/rehospitalisation, people allocated olanzapine fared a little better than risperidone (NNT 13 CI 6 to 421).



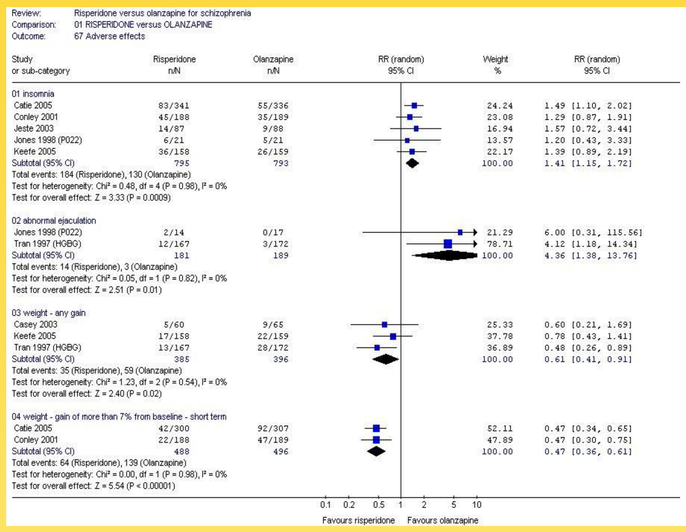
Mental state: For the outcome of 'no <20%/<30%/<40% decrease in PANSS' in short, medium or long term we found no difference between the two drugs.

For the outcome of 'no <50% decrease' in PANSS beyond 26 weeks the results just favoured olanzapine (n=339, 1 RCT, RR 1.11 CI 1.01 to 1.22, NNT 12 CI 6 to 127).

Both medications are associated with high attrition rates, however, risperidone participants were more likely to drop out by 12 months and beyond.



Adverse effects



More than two thirds of people given either drug experienced an adverse event important enough to be recorded in a company-sponsored trial and about 20% of people in both groups experienced anticholinergic symptoms.

People given risperidone were more likely to experience insomnia (NNH 15 CI 9 to 41) and sexual dysfunction (abnormal ejaculation NNH 19 CI 5 to 167)

People given olanzapine were more likely to gain weight and this gain can be considerable and swift (more than 7% weight gain in < 12 weeks NNH 7 CI 6 to 10)

Discussion

Evaluative studies provide us with very little information regarding service outcomes, general functioning and behaviour, engagement with services and treatment satisfaction for these highly marketed drugs.

There is not much to differentiate between risperidone and olanzapine in terms of efficacy or inefficacy.

For both risperidone and olanzapine adverse effects

- ☹ ***are common***
- ☹ ***really differentiate these drugs***
- ☹ ***are unpleasant and disabling***

Reference

Jayaram MB, Hosalli P. Risperidone versus olanzapine for schizophrenia. *The Cochrane Database of Systematic Reviews* 2005, Issue 2

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