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SCHIZOPHRENIA Factsheet

October 2020

What is effective antipsychotic dose?

Antipsychotic dose comparison determines the lowest dose range that is sufficient to produce a satisfactory clinical response, while avoiding unnecessary side effects. Near-maximal effective dose is the highest dose just before efficacy plateaus and minimum effective dose is the lowest dose that is significantly more effective than placebo.

What is the evidence for antipsychotic dose?

Moderate quality evidence finds a small to medium-sized effect of fewer relapses in people receiving standard dose antipsychotics compared to those receiving very low dose antipsychotics (< 50% of daily defined dose), although very low dose antipsychotics produced fewer side effects. No differences were reported in relapses or side effects when low dose (50 to < 100% of daily defined dose) was compared to standard dose.

Moderate to low quality evidence finds no differences in clinical improvement between low dose (≤400 mg/day) and medium dose (401 mg/day to 800 mg/day) chlorpromazine, but there were higher rates of extrapyramidal symptoms with medium-dose chlorpromazine in the short-term only (up to 12 weeks). Moderate quality evidence finds a small effect of greater clinical improvement and a medium-sized effect of fewer relapses with high-dose chlorpromazine (>800 mg/day) compared to low dose (≤400 mg/day) chlorpromazine. There were more extrapyramidal symptoms and more people leaving the study early for any reason in the high-dose group, although more people in the low-dose group left the study due to deterioration in behaviour.

Moderate to high quality evidence finds intermittent antipsychotic therapy used only during periods of symptom exacerbation or imminent relapse is less effective for preventing relapse than ongoing maintenance therapy. There were small effects showing rapid initiation/titration of antipsychotic therapy was significantly superior to slow initiation for improving symptoms in acute patients. There were no differences in symptom severity between rapid or slow initiation in stable patients switching from one antipsychotic to another, and no benefit for symptoms by increasing antipsychotic dose when patients do not respond initially to standard doses.

Moderate to high quality evidence finds a large effect of lower clozapine concentration to dose ratio and a medium-sized effect of lower olanzapine concentration to dose ratio in smokers versus non-smokers with schizophrenia.

Moderate to low quality evidence finds different minimum and near-maximal effective doses for individual antipsychotic medications (for details, see the technical table).

For more information see the technical table

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NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.

HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at **neura.edu.au/donate/schizophrenia**.

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