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# Dyskinesia

## SCHIZOPHRENIA Factsheet

February 2022

### What are movement disorders?

Movement disorders including extrapyramidal symptoms are common side effects of many antipsychotic medications. Extrapyramidal symptoms include tardive dyskinesia, a severe and chronic condition involving repetitive, involuntary movements, most commonly occurring around the mouth and face. Akathisia is characterised by a feeling of restlessness and movements such as shuffling of the legs, pacing, rocking from foot to foot, or the inability to sit down or stand still. Dystonia involves muscular spasms and abnormal postures. Medications prescribed to treat the side effects of antipsychotic drugs increase adherence to antipsychotics, which reduces the risk of psychotic relapse.

### What is the evidence for treatments for movement disorders?

For tardive dyskinesia, moderate to low quality evidence finds large benefits over placebo of the hormone insulin, the antipsychotic promethazine, and pyridoxal 5 phosphate (vitamin B6). There were medium-sized benefits over placebo for the anxiolytic buspirone, the cognitive enhancer/stimulant pemoline, and the alkaloids dihydrogenated ergot alkaloid and L-Stepholidine. There were small benefits over placebo for GABA-acting medications, branched-chain amino acids, enzyme VMAT2 inhibitors, ginkgo biloba, and the antiepileptic levetiracetam. There was a medium to large benefit of the antidepressant isocarboxazid over the anticholinergic procyclidine.

There were no significant benefits for tardive dyskinesia of ceruletide, vitamin E, cholinergic medications, noradrenergic or dopaminergic medications, benzodiazepines, evening primrose oil, lithium, oestrogen, the antidepressants selegiline and ritanserin, melatonin, the antihistamine cyproheptadine, the alkaloid papaverine, the cognitive enhancer piracetam, eicosapentaenoic acid derivative, and the antiepileptic levetiracetam.

For akathisia, moderate quality evidence finds a large benefit of 5-HT<sub>2A</sub> antagonists over placebo, with no differences in sedation levels. There was no benefit of eicosapentaenoic acid derivative for akathisia. For dystonia, moderate to low quality evidence finds a small benefit of eicosapentaenoic acid derivative over placebo. For catatonia, only one small study assessed the effects of benzodiazepines and found no benefit over placebo.

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.*

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