

RGH Pharmacy E-Bulletin

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A joint initiative of the Patient Services Section and the Drug and Therapeutics Information Service of the Pharmacy Department, Repatriation General Hospital, Daw Park, South Australia. The RGH Pharmacy E-Bulletin is distributed in electronic format on a weekly basis, and aims to present concise, factual information on issues of current interest in therapeutics, drug safety and cost-effective use of medications.

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Management of psychosis in Parkinson's disease

There are many challenges associated with the late stages of Parkinson's Disease (PD), but psychosis may be the most distressing for both patients and care givers. Studies have shown that psychosis, not motor dysfunction, is the single greatest risk factor for placement in a nursing home for patients with PD and is associated with significantly increased mortality. Thus, appropriate management of psychosis may enable patients to remain in their own homes instead of institutionalised care. Psychosis occurs in 20-40% of patients being treated with drugs for PD although it can also occur in non-drug treated patients with a lower incidence. The most common psychotic symptom is visual hallucinations. Other forms of hallucination such as auditory, olfactory and tactile hallucinations can occur but with a lower frequency and occur often in combination with visual hallucinations. Delusions are a common characteristic of psychosis and are usually paranoid in nature. Common delusions include people stealing money, spousal infidelity, nursing staff plotting against them or intruders living in the house. Delirium and dementia occur frequently in patients with PD and may manifest as psychosis.

Psychosis in PD can be attributed to underlying Lewy body disease, to antiparkinson medication therapy or a combination of the two. Risk factors for developing psychosis in PD include use of high doses of antiparkinson medications, co-existing diagnosis of dementia, increased age, depression, sleep disorders, longer disease duration, impaired vision and high co-morbid disease burden.

Treatment of psychosis in PD requires a stepwise approach. Firstly investigations need to be made for correctable infectious, toxic and metabolic manifestations that may trigger psychosis or delirium. Once these things have been excluded drug therapy should be examined. Firstly antiparkinson drug regimes should be simplified with medications being reduced in a tapering fashion and ceased if necessary. Medications with the highest risk to benefit ratio should be targeted first. This involves tapering and stopping anticholinergic drugs first, followed by selegiline, dopamine agonists, amantidine and finally catechol-O-methyltransferase (COMT) inhibitors. Levodopa is the last agent to be reduced. Often a point is reached where further reduction in antiparkinson medications will jeopardize motor function and if psychosis persists then an antipsychotic may be started.

Typical antipsychotics (haloperidol, pericyazine, trifluoperazine etc) block dopamine 2 receptors (D2) in the nigrostriatal pathway and exacerbate the motor symptoms of PD and should be avoided. Atypical antipsychotics agents such as clozapine and quetiapine have been used with success in the treatment of psychosis in PD. Clinical trials have demonstrated clozapine to be an effective agent that is not associated with worsening of motor function: in fact, this drug is observed to improve tremor. Due to the serious and potentially life threatening side effects of agranulocytosis, clozapine is not available for the treatment of psychosis associated with PD in Australia. In other countries it is prescribed in low doses starting at 6.25mg daily and increasing slowly to a maximum of 75mg a day in conjunction with stringent white blood cell and neutrophil monitoring.

Quetiapine is an effective alternative to clozapine and is the treatment of choice for psychosis in PD in Australia. Unlike clozapine it does not cause life threatening blood dyscrasias and has not been shown to improve tremor, but is not associated with worsening of motor function. Commence Quetiapine at 12.5mg at night or twice a day with a gradual increase every three to five days, according to clinical response to 25mg two or three times a day. Doses as high as 200mg a day may be necessary to achieve the best response. Other atypical antipsychotics olanzapine and risperidone may be associated with worsening of motor function in PD and could be used if quetiapine is not tolerated.

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FOR FURTHER INFORMATION – CONTACT THE PHARMACY DEPARTMENT ON 82751763 or email: chris.alderman@rgh.sa.gov.au
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