

Table 5.1 Medications Used to Treat Psychosis

Medication	Indications	Dosing	Side effects affecting rehab	Other side effects or considerations
First-generation (typical) agents				
Chlorpromazine (Thorazine)	Psychosis in nonadherent patients or patients not responsive to single or dual atypical agent therapy	Start at 50-100 mg/day in 3 divided doses and increase to 300-1000 mg/day; may be once-daily dose	Cog: ++++ Motor: +++ D: +++ Com: +++ F: +++	Weight gain: ++++ Seizure: +++ Cardiac: ++ Sexual: +++
Chlorprothixene (Taractan)	Psychosis in nonadherent patients or patients not responsive to single or dual atypical agent therapy	Start at 25 mg twice/day and increase up to 400 mg/day (maximum dose); may be once-daily dose	Cog: +++ Motor: ++ D: ++ Com: +++ F: +++	Weight gain: ++ Seizure: ++ Cardiac: + Sexual: ++
Fluphenazine (Prolixin)	Psychosis in nonadherent patients or patients not responsive to single or dual atypical agent therapy	Start at 5 mg/day in 3 divided doses and increase to 5-20 mg/day; may be once-daily dose	Cog: + Motor: ++++ D: + Com: + F: +	Weight gain: + Seizure: 0 Cardiac: 0 Sexual: ++++
Haloperidol (Haldol)	Acute agitation, psychosis in nonadherent patients or patients not responsive to single or dual atypical agent therapy	Start at 2-5 mg/day in 1-3 divided doses and increase to 2-20 mg/day; may be once-daily dose	Cog: + Motor: ++++ D: +++ Com: + F: ++	Weight gain: + Seizure: 0 Cardiac: 0 Sexual: ++++
Loxapine (Loxitane)	Psychosis in nonadherent patients or patients not responsive to single or dual atypical agent therapy	Start at 20 mg/day and increase up to 250 mg/day (maximum dose); may be once-daily dose	Cog: ++ Motor: +++ D: ++ Com: ++ F: ++	Weight gain: + Seizure: + Cardiac: + Sexual: ++
Mesoridazine (Serentil)	Psychosis in nonadherent patients or patients not responsive to single or dual atypical agent therapy	Start at 50 mg 3 times/day and increase up to 400 mg/day (maximum dose); may be once-daily dose	Cog: +++ Motor: + D: +++ Com: +++ F: +++	Weight gain: ++ Seizure: +++ Cardiac: ++ Sexual: ++
Molindone (Moban)	Psychosis in nonadherent patients or patients not responsive to single or dual atypical agent therapy	Start at 15 mg/day and increase up to 225 mg/day (maximum dose); may be once-daily dose	Cog: + Motor: +++ D: ++ Com: + F: ++	Weight gain: + Seizure: + Cardiac: + Sexual: ++
Pimozide (Orap)	Psychosis in nonadherent patients or patients not responsive to single or dual atypical agent therapy	Start at 1 mg/day and increase up to 10 mg/day (maximum dose); may be once-daily dose	Cog: + Motor: +++ D: ++ Com: + F: ++	Weight gain: + Seizure: 0 Cardiac: ++ Sexual: ++
Perphenazine (Trilafon)	Psychosis in nonadherent patients or patients not responsive to single or dual atypical agent therapy	Start at 4-8 mg/day in 3 divided doses and increase to 16-64 mg/day; may be once-daily dose	Cog: ++ Motor: ++++ D: ++ Com: ++ F: ++++	Weight gain: ++ Seizure: + Cardiac: + Sexual: ++++
Thioridazine (Mellaril)	Psychosis in nonadherent patients or patients not responsive to single or dual atypical agent therapy	Start at 50-100 mg 3 times/day and increase up to 800 mg/day (maximum dose); may be once-daily dose	Cog: ++++ Motor: +++ D: +++ Com: ++++ F: ++++	Weight gain: + Seizure: +++ Cardiac: ++ Sexual: +++ Agent with highest risk for

From L. Carl, J. Gallo, and P. Johnson, 2014, *Practical Pharmacology in Rehabilitation: Effect of Medication on Therapy* (Champaign, IL: Human Kinetics).

Medication	Indications	Dosing	Side effects affecting rehab	Other side effects or considerations
				anticholinergic side effects, orthostasis, sedation, and cardiac arrhythmia.
Thiothixene (Navane)	Psychosis in nonadherent patients or patients not responsive to single or dual atypical agent therapy	Start at 4-10 mg/day in 2-3 divided doses and increase to 15-20 mg/day; may be once-daily dose	Cog: + Motor: ++++ D: + Com: + F: ++	Weight gain: + Seizure: +++ Cardiac: 0 Sexual: ++++
Trifluoperazine (Stelazine)	Psychosis in nonadherent patients or patients not responsive to single or dual atypical agent therapy	Start at 4-10 mg/day in 2 divided doses and increase to 5-20 mg/day; may be once-daily dose	Cog: + Motor: +++ D: +++ Com: + F: ++	Weight gain: + Seizure: 0 Cardiac: 0 Sexual: ++++ High risk for extrapyramidal side effects.
<b>Second-generation (atypical) agents</b>				
Aripiprazole (Abilify)	Initial therapy in treatment of psychosis or as adjunct in treatment of depression not fully responsive to antidepressant therapy	Start at 10-15 mg/day and increase to 20-30 mg/day; may be once-daily dose	Cog: + Motor: + D: + Com: + F: +	Weight gain: + Seizure: 0 Cardiac: + Sexual: +
Asenapine (Saphris)	Initial therapy in treatment of psychosis or as adjunct in treatment of depression not fully responsive to antidepressant therapy	Start at 5 mg sublingually twice/day and titrate up to 10 mg twice/day; do not eat or drink for 10 min after taking	Cog: + Motor: ++ D: + Com: + F: ++	Weight gain: + Seizure: 0 Cardiac: + Sexual: +
Clozapine (Clozaril)	Fourth-line agent added with failure of triple therapy for treatment of psychosis	Start at 12.5-25 mg in 1-2 divided doses and increase to 300-450 mg/day; must be in divided doses to sustain effects	Cog: ++++ Motor: + D: ++++ Com: ++++ F: ++++	Weight gain: ++++ Seizure: ++++ Cardiac: +++ Sexual: + Has the worst side effect profile (i.e., risk of seizures, anticholinergic effects, hypersalivation, myocarditis, and agranulocytosis); for this reason, requires pharmacist and prescriber registration with the manufacturer's Clozaril National Registry, a dispensing and monitoring program that requires white blood counts to be done weekly for the first 6 mo and then continuously throughout therapy.

From L. Carl, J. Gallo, and P. Johnson, 2014, *Practical Pharmacology in Rehabilitation: Effect of Medication on Therapy* (Champaign, IL: Human Kinetics).

Medication	Indications	Dosing	Side effects affecting rehab	Other side effects or considerations
				Used when other agents have failed to provide therapeutic effects.
Iloperidone (Fanapt)	Initial therapy in treatment of psychosis	Start at 2 mg/day in 2 divided doses and increase to 12-24 mg/day; may be once-daily dose	Cog: + Motor: + D: ++ Com: + F: +++	Weight gain: ++ Seizure: 0 Cardiac: ++ Sexual: + High risk of orthostasis, titrate slowly. Prolongs QT interval.
Lurasidone (Latuda)	Initial therapy in treatment of psychosis	Start at 40 mg/day; may increase to 80 mg/day	Cog: + Motor: + D: + Com: + F: +	Weight gain: + Seizure: 0 Cardiac: + Sexual: + Prolongs QT interval.
Olanzapine (Zyprexa)	Initial therapy in treatment of psychosis, adjunct therapy in treatment of depression not completely responsive to antidepressant therapy	Start at 5-10 mg/day and increase to 20 mg/day; may be once-daily dose	Cog: ++ Motor: ++ D: ++ Com: ++ F: ++	Weight gain: ++++ Seizure: + Cardiac: + Sexual: + High risk of metabolic effects and weight gain.
Paliperidone (Invega extended release)	Psychosis in patients with poor medication adherence	6 mg once/day (maximum dose)	Cog: + Motor: ++ D: + Com: + F: ++	Weight gain: ++ Seizure: 0 Cardiac: +++ Sexual: ++++ Prolongs QT interval. Principal active metabolite of risperidone. Half-life is 30 h. 30% of the drug is metabolized by the CYP2D6 enzymes and is eliminated renally. Not recommended in patients with renal creatinine clearance <50 ml/min.
Risperidone (Risperdal)	Agitation and psychotic symptoms	Start at 2 mg/day in 1-2 divided doses and increase to 2-8 mg/day; may be once-daily dose	Cog: + Motor: ++ D: + Com: + F: ++	Weight gain: ++ Seizure: 0 Cardiac: ++ Sexual: ++++ Prolongs QT interval.
Quetiapine IR (Seroquel IR)	Initial therapy for treatment of psychosis and of patients with bipolar disorder, adjunct to antidepressants in patients with depression not responsive to	Start at 50 mg in 2-3 divided doses and increase to 300-400 mg/day; must be in divided doses to sustain effects	Cog: ++ Motor: ++ D: + Com: ++ F: +++	Weight gain: ++ Seizure: 0 Cardiac: ++ Sexual: + High risk for orthostasis and falls.

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Medication	Indications	Dosing	Side effects affecting rehab	Other side effects or considerations
	antidepressant therapy alone			
Quetiapine XR (Seroquel XR)	Treatment of psychosis and of patients with bipolar disorder, adjunct to antidepressants in patients with depression not responsive to antidepressant therapy alone	Start at 300 mg once/day and increase to 400-800 mg/day	Cog: ++ Motor: + D: + Com: ++ F: ++	Weight gain: ++ Seizure: 0 Cardiac: ++ Sexual: + High risk for orthostasis and falls.
Ziprasidone (Geodon)	Acute agitation or initial treatment of psychosis	Start at 40 mg/day in 2 divided doses with food and increase to 40-160 mg/day; must be in divided doses to sustain effects	Cog: ++ Motor: ++ D: + Com: ++ F: +	Weight gain: + Seizure: 0 Cardiac: +++ Sexual: + High risk of QT prolongation and torsades de pointes with higher doses and injectable form.
Long-acting depot formulations				
Fluphenazine decanoate IM (Prolixin Decanoate)	Psychosis in patients with adherence problems	Start at 12.5-25 mg IM every 1-3 wk and increase in 12.5-25 mg increments every 4 wk to 50 mg IM every 4-6 wk (maximum dose is 100 mg)	Cog: + Motor: ++++ D: + Com: + F: +	Weight gain: + Seizure: 0/+ Cardiac: 0 Sexual: ++++
Haloperidol decanoate IM (Haldol Decanoate)	Psychosis in patients with adherence problems	Start at 25-50 mg IM every 2-4 wk and increase to 50-200 mg IM every 2-4 wk	Cog: + Motor: ++++ D: +++ Com: + F: ++	Weight gain: + Seizure: 0 Cardiac: 0 Sexual: ++++ Prolongs QT interval.
Risperidone IM (Risperdal Consta)	Psychosis in patients with adherence problems	Start at 12.5 mg IM every 2 wk and increase to 25 mg IM every 2 wk	Cog: + Motor: ++ D: + Com: + F: ++	Weight gain: ++ Seizure: 0 Cardiac: ++ Sexual: ++++ Prolongs QT interval.
Paliperidone (Invega Sustenna, Invega extended release)	Psychosis in patients with adherence problems	Treatment day 1: 234 mg IM, deltoid only Treatment day 8: 156 mg IM, deltoid only Maintenance dose of 117 mg begins 1 mo after second initiation dose; may increase to maximum dose of 234 mg/mo	Cog: + Motor: ++ D: + Com: + F: ++	Weight gain: ++ Seizure: 0 Cardiac: +++ Sexual: ++++ Prolongs QT interval. Not recommended in patients with renal creatinine clearance <50 ml/min.

Cog = cognition; Motor = discoordination; D = dysphagia; Com = communication; F = falls; IM = intramuscular.

Weight gain is associated with metabolic effects such as increased risk for diabetes, coronary heart disease, myocardial infarction, and stroke. Seizure indicates risk for worsening or new onset of seizures. Cardiac side effects include arrhythmia and orthostatic hypotension. Sexual side effects are associated with gynecomastia and other sexual side effects.

The likelihood rating scale for encountering the side effects is as follows: 0 = Almost no probability of encountering side effects. 0/+ = Slight probability of encountering side effects with higher doses. + = Little likelihood of encountering side effects. +/++ = Low probability of encountering side effects; however, probability increases with increased dosage. ++ = Medium likelihood of encountering side effects. +++ = High likelihood of encountering side effects, particularly with high doses. ++++ = Highest likelihood of encountering side effects; best to avoid in at-risk patients.