



Indian Health Service
National Pharmacy and Therapeutics Committee
Formulary Brief: Atypical Antipsychotic Drugs Update
-August 2015-



Background:

In August 2015, the Indian Health Service (IHS) National Pharmacy and Therapeutics Committee (NPTC) reviewed the atypical antipsychotic drug class, also known as second generation antipsychotic agents. The current IHS National Core Formulary (NCF) currently requires facilities to maintain an atypical antipsychotic agent on formulary but leaves selection of the specific agent at the discretion of the local facility. As a result of the August 2015 meeting, no changes were made to the NCF.

Discussion:

Recent Cochrane reviews comparing quetiapine and aripiprazole to other atypical antipsychotic drugs (asenapine, iloperidone, lurasidone, olanzapine, paliperidone, quetiapine, risperidone, and ziprasidone) demonstrated a lack of clinical superiority universally for any individual atypical antipsychotic agent.^{1,2} Vast differences in adverse effect profiles are noted for the atypical antipsychotic agents that may affect patient adherence and/or tolerability.² Selection of an atypical antipsychotic warrants careful evaluation of its benefits and disadvantages for use in individual patients, specifically potential metabolic issues such as weight gain, elevated cholesterol and an increased risk for diabetes. Clinical guidelines recommend providers engage patients in meaningful discussion (therapeutic alliance) about associated medication adverse effects to help guide antipsychotic selection.³ Agency procurement and utilization data illustrate that selection of atypical antipsychotics across the IHS varies significantly.

Clozapine should be considered for patients who experience positive symptoms (hallucinations, delusions, disorganized thinking/ behavior) after 2 trials of other antipsychotic drugs (can be either typical or atypical) at maximally-tolerated doses for at least 6 weeks. Clozapine has also been shown to reduce suicide attempts and can be used in patients at high risk of suicide.^{4,5} Clozapine has 4 specific black box warnings: agranulocytosis, orthostatic hypotension, seizures, and myocarditis/ cardiomyopathy.

Findings:

The current NCF states “any product” for the atypical antipsychotic drug class. Although no changes were made to the NCF, the NPTC felt it would be useful to provide a reference guide to the field highlighting the adverse effect profile used to help guide clinical decisions for the various atypical antipsychotic agents available. The following table was adapted from UpToDate.⁶

Drug	Weight Gain / Diabetes	Elevated Cholesterol	EPS / TD	Prolactin increase	Sedation	Ach* side effects	Orthostatic HTN	QTc prolongation
Aripiprazole	+	-	++	-	+	-	-	-/+
Asenapine	++	-	++	++	++	-	+	+
Clozapine	++++	++++	++++	-	+++	+++	+++	+
Iloperidone	++	++	-	-	+	+	+++	++
Lurasiodone	+	-	-	-	++	-	+	-
Olanzapine	++++	++++	++	+	++	++	+	+
Paliperidone	+++	+	+	+++	+	-	++	+
Quetiapine	+++	+++	++	-	++	+	++	++
Risperidone	+++	+	+++	+++	+	+	+	+
Ziprasidone	-	-	+	+	+	-	+	++

EPS = Extra pyramidal symptoms; TD = tardive dyskinesia; Ach* = acetylcholinesterase; HTN = hypertension; QTc = corrected Q-T interval

References:

- 1.) Khanna P et al. Aripiprazole versus other atypical antipsychotics for schizophrenia. Cochrane Collaboration [Internet]. 2013 February 28 [cited 2015 August 27]; 2013 (2). Available from: <http://bit.ly/1JKfCj0>
- 2.) Asmal L, Flegar SJ, Wang J, et al. Quetiapine versus other atypical antipsychotics for schizophrenia (review). Cochrane Collaboration. 2013 (11). Available from: <http://bit.ly/1N8IYv7>
- 3.) Psychosis and schizophrenia in adults: treatment and management. National Institute for Health and Care Excellence (UK) 2014. National Clinical Guidelines, No. 178.
- 4.) UpToDate [Internet]. Philadelphia: Wolters Kluwer Health; c2014. Treatment-resistant schizophrenia; 2015 January 29 [cited 2015 August 28]: Available from: <http://bit.ly/1N0Rk5a>
- 5.) MicroMedex. Thompson Healthcare Products. Clozapine; Available from: <http://bit.ly/1Xd3AnV>
- 6.) UpToDate. Philadelphia: Wolters Kluwer Health; c2014. Second-generation antipsychotic medication: pharmacology, administration, and comparative side effects; 2015 February 25 [cited 2015 Aug 27]: Available from: <http://bit.ly/1KEWvYm>