

INTRAMUSCULAR MEDICATIONS FOR ACUTE AGITATION

FIRST LINE

Medication	Dose	Pros	Cons	Comments
Midazolam	5 to 10 mg	Rapid acting No EPS	Respiratory depression Sedation Anterograde amnesia	FDA "black-box" warning for IV use Avoid use in children, geriatric patients, those with acute alcohol intoxication, or those with traumatic brain injury
Haloperidol	2.5 to 10 mg	Antipsychotic effects	EPS QTc prolongation <i>In vitro</i> neuronal cell death	Up to 40% risk of akathisia from a single dose Concomitant anticholinergic and/or benzodiazepine may be insufficient to prevent EPS FDA "black-box" warning for IV use Unclear if <i>in vitro</i> toxicity occurs <i>in vivo</i>
Droperidol	2.5 to 10 mg	Rapid acting	QTc prolongation EPS	FDA "black-box" warning Akathisia risk not well studied
Ketamine	3 to 6 mg/kg	Rapid acting No EPS	Respiratory depression Dissociation Possible psychotic symptom exacerbation	Unclear safety of parenteral administration Untested in randomized controlled trials

SECOND LINE

Medication	Dose	Pros	Cons	Comments
Lorazepam	2 to 4 mg	No EPS	Sedation	Avoid use in children, geriatric patients, those with acute alcohol intoxication, or those with traumatic brain injury
Olanzapine	5 to 10 mg	Antipsychotic effects	EPS risk, but lower than haloperidol	Not recommended for combination with lorazepam
Ziprasidone	10 to 20 mg	Antipsychotic effects	EPS risk, but lower than haloperidol	Not studied in combination with lorazepam
Aripiprazole	9.75 mg	Antipsychotic effects	EPS risk, but lower than haloperidol	IM immediate-release formulation is no longer available in the United States Not studied in combination with lorazepam

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