

## Note

# An Outline of Hazardous Side Effects of Ritalin (Methylphenidate)

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Ritalin (methylphenidate) has been used with much success in attention deficit disorders of children. It has also been shown to be effective in narcolepsy, which is a sleep attack disorder. The literature also reveals a very limited possible effectiveness for Ritalin in very mild depression, senile withdrawn behavior, and apathy.

Even though this clinician feels that Ritalin is effective in attention deficit disorders of children, he has extreme reservations about the use of this stimulant in any other conditions. The *Physicians' Desk Reference* does not list all of the specific side effects of this medication, especially those that have been seen in psychiatric patients. Because Ritalin is a DEA Schedule II Drug with high abuse potential, it may have great legal implications for physicians who prescribe Ritalin in a casual fashion.

This outline presents specific side effects reported in the literature which physicians may want to be aware of in their prescribing practice. The applicable literature source (Notes 1-41) is cited with each side effect.

## Psychic Side Effects of Ritalin (Methylphenidate)

Hypomanic and manic symptoms: 1

Self-depreciation: 2

Paranoid delusions: 2, 3, 4

Increased delusions: 3, 5

Activates preexisting delusions: 3, 5, 6

Paranoid psychosis: 7, 8

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- Amphetamine-like psychosis: 9
- Increased psychosis: 3, 5, 6
- Activates psychotic symptoms: 5, 10
- Increased psychosis in manic patients: 5
- Greater potency relative to amphetamine in worsening psychosis: 6, 10
- Toxic psychosis: 4, 11, 12
- Hallucinations: 3, 13
- Visual hallucinations: 2, 5
- Auditory hallucinations: 2, 5
- Activates preexisting hallucinations: 3, 5, 6
- Increased hallucinations: 5
- Can surpass LSD in producing bizarre experiences: 14
- Exacerbates schizophrenia: 3, 5, 7, 15, 16, 17, 18, 19
- Stimulants commonly precipitate psychotic symptom in patients with schizophrenia who are not known to be clinically ill when the drugs are prescribed: 20
- Exacerbates symptoms of behavior disturbance and thought disorder in psychotic children: 11
- Effects pathological thought processes: 3
- Increases in global psychotic test ratings: 3, 5, 6
- Increases in pathological responses: 3
- Increases in autism: 3, 5
- Increases in boundary loss: 3
- Increases in disorganization: 3
- Can give nonpsychotic pathological thinking: 3
- Causes loosening of associations: 3, 5
- Increased catatonic symptoms: 3, 5
- Increases bizarre behavior: 3
- Increased idiosyncratic thinking: 3
- Activates projection: 3
- Activates uncommon word associations: 3
- Muteness: 5
- Waxy flexibility: 5
- Extreme withdrawal: 5
- Inactivity: 5
- Partial dissociation: 21
- Inappropriate answers to standard questions: 22
- Extremely disturbing for patients with psychosis: 21
- Agitation: 7
- Increased talkativeness: 3
- Nervousness: 11
- Increased inappropriate affect: 5
- Increased flattening of affect: 5
- Terrified affect: 5
- Started screaming: 5
- Aggressiveness: 5
- Assaultiveness: 5
- Panic: 21
- Unpleasant production of tension: 21
- CNS stimulation, 23
- Anxiety: 5, 8, 11, 14, 19, 24, 25, 26
- Insomnia: 11
- Religious preoccupations: 5
- Rebound depressive affect: 19, 21
- Since Ritalin is considered an amphetamine-type drug, expect amphetamine-like effects: 6, 12, 18, 27
- Amphetamines have been used as agents of torture: 28
- Amphetamines increase positive symptoms of schizophrenia: 29
- "Pep pills" are dangerous: 30
- Psychic dependence: 11, 31
- Drug abuse: 4, 5, 7, 12, 14, 18, 32, 33
- High abuse potential DEA Schedule II Drug: 34

Decreased REM sleep: 35  
 Increased euphoria: 19  
 Has cocaine-like activity: 12  
 Ability to harm patients: 14, 21, 36  
 Credibility problems with patients: 37, 38  
 Organic brain syndrome: 9  
 Antipsychotic medication may not affect increase in psychotic ratings caused by Ritalin: 5, 6  
 Abnormal behavior: 11

*Psychiatric contraindications:*

Anxiety, tension, agitation, and severe depression: 11, 31  
 Contraindicated in agitated depression: 4  
 Seemed definitely contraindicated in psychotic and prepsychotic patients: 21

**Physical Side Effects of Ritalin (Methylphenidate)**

When used with antidepressants, one may see dangerous reactions including hypertension, seizures, and hypothermia: 39  
 Increased blood pressure: 3, 6, 12, 15, 27  
 Increased pulse rate: 3, 5, 6, 12, 15, 27  
 Increased respiration rate: 12  
 Convulsions: 11, 21  
 Brain damage may be seen with amphetamine abuse: 40

Potential cerebrovascular and cardiovascular complications: 27  
 Deaths during athletic contests have been traced to amphetamine use: 41  
 Palpitations: 11  
 Headache: 11  
 Tachycardia: 11  
 Angina: 11  
 Cardiac arrhythmia: 11  
 Weight loss during prolonged therapy: 11  
 Scalp hair loss: 11  
 Dermatological conditions: 11  
 Dizziness: 11  
 Fever: 11  
 Arthralgia: 11  
 Vasculitis: 11  
 Thrombocytopenic purpura: 11  
 Nausea: 11  
 Abdominal pain: 11  
 Dyskinesia: 11  
 Drowsiness: 11  
 Leukopenia: 11  
 Visual disturbances: 11  
 Anemia: 11

*Physical contraindications:*

Those hypersensitive to the drug; persons with glaucoma; those with a history of motor tics; persons with a family history or diagnosis of Tourette's syndrome: 11  
 It seems inappropriate to use it in usual clinical practice: 5

## NOTES

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