



Using *Risperidone* in Children and Adolescents with Disruptive Behaviour Disorders

This information explains how *risperidone* can be used as part of a treatment plan for children and adolescents with severe mood dysregulation, irritability, severe tantrums, self injurious behavior or aggression in patients with various diagnoses including mental handicap, autism, and disruptive behavior disorders such as ADHD, oppositional defiant disorder or conduct disorder. You may wish to share this information with family members to help them to understand the treatment options. Since every person's needs are different, it is important that you follow the advice provided to you by your own doctor, nurse and/or pharmacist and speak to them if you have any questions about this medication.



Overview

Risperidone (Risperdal[®] and generic forms) belongs to a group of medications sometimes called “atypical antipsychotics” or “second-generation antipsychotics”.

What is risperidone used for?

Risperidone was originally developed as an antipsychotic, meaning that it was used to treat psychotic conditions. In the last five years research has shown that very low doses of this medication (1 mg per day or less) can be helpful in treating children with severe mood dysregulation, aggression, or irritability. You should talk with your doctor about why he or she is considering use of this medication for your child.



How does risperidone work?

Risperidone adjusts the functioning of certain chemicals in the brain called dopamine and serotonin. The exact way that risperidone improves these symptoms is not fully known.

How should risperidone be taken?

The doses which are used to help children with these conditions are much lower than the doses that are used to treat psychosis, and so the side effects are different to what you may find in the pharmacy insert. This medication may be prescribed to be taken either twice a day (morning and evening) or just once a day in the evening.



When will this medication start working?

It may take one week before the benefits of risperidone become noticeable. When risperidone is working well, the person taking risperidone and/or his/her family members may notice that he or she is less irritable, less explosive or less angry. Others may say their mood is more settled. Continue taking risperidone regularly, even if your symptoms go away completely, as this can prevent symptoms from coming back.

Risperidone does not work for everyone. Your doctor will give you a follow up appointment to find out if the medication has been helpful.

How long do I have to take this medication?

This depends on the symptoms you have, how frequently they occur and how long you have had them. Your doctor will discuss with you the benefits and risks of taking risperidone. At this time, you can also discuss how long you

might need to take risperidone. This medication can be stopped abruptly without a problem if you experience side effects that are uncomfortable and cannot reach your doctor. However, you should not abruptly stop stimulant medication and continue taking risperidone or you may get what is called “extrapyramidal side effects” (EPS), which can include muscle rigidity, eye rolling, and restlessness. If this happens this side effect will disappear within half an hour of taking 25 mg of diphenhydramine (Benadryl[®]) so we recommend you obtain and keep a small amount of diphenhydramine at home. If EPS occurs, you should contact your doctor as soon as possible.

What are the side effects and what should I do if I get them?

For some people, risperidone increases appetite and sleepiness. In patients who are overweight this can be a serious problem, and has been shown to be associated with an increased risk for metabolic syndrome, diabetes, or increased lipids. This symptom is very unlikely in children with normal blood pressure, who are thin, and who have normal blood work and low risk for diabetes. In children who are thin, and who have poor appetite, the side effect of increased appetite may be helpful. In children who have problems falling asleep the side effect of causing sleepiness at night may also be an asset.

Another possible delayed/long-term side effect of risperidone is called *tardive dyskinesia* which is a disorder characterized by abnormal movements. Tardive dyskinesia is not uncommon with higher doses used to treat adults with schizophrenia, but in children with ADHD who took low doses of risperidone the incidence of tardive dyskinesia after one year of continuous use was 2 cases out of 737. In both of these cases, tardive dyskinesia disappeared when the medication was discontinued. The risk of tardive dyskinesia in children taking relatively higher doses of risperidone than are prescribed as above was 1 in approximately 370 (0.27%) per year of risperidone usage.

Uncommon side effects (e.g., those that occur in less than 5% of patients)

Contact your doctor IMMEDIATELY if you have any of these side effects:

- Muscle spasms or stiff muscles (usually relieved by diphenhydramine (Benadryl[®]) 25mg; call your doctor)
- Agitation and feelings of restlessness (*avoid caffeine, from colas, coffee and some teas*)
- Difficulty swallowing
- Breast tenderness or breast leaking
- Unexplained fever (Note: This may be a warning sign of a rare, serious side effect)
- Confusion
- Fast and irregular heart beat (this effect may be temporary and go away over time)



Rarely, high blood sugar (diabetes), increased prolactin (a hormone), or high blood lipid levels have been found in children and adults taking risperidone for various conditions. (Note: it would be unlikely that you would be able to feel these effects if they happened). Although a theoretical risk exists, these effects have not been documented with risperidone when used at low doses in children and adolescents with disruptive behavior disorders.

What precautions should my doctor and I be aware of when taking this medication?

Tell your doctor or pharmacist if you:

- have any allergies or have had bad reactions to other medications.
- are taking, or start taking any other prescription or non-prescription medications. Many medications can interact with risperidone, such as carbamazepine (Tegretol[®]), heart medications, antidepressants, antibiotics, stomach medications and several others. Your doctor may need to change the doses of your medication(s) or monitor you carefully for side effects if you are taking medications that interact with risperidone.
- have a history of heart disease, kidney or liver disease, a bowel obstruction, diabetes (or a family history of diabetes) or glaucoma.
- are pregnant (or are planning to become pregnant) or are breast-feeding. Tell your doctor if you become pregnant while taking risperidone.

- are currently using alcohol or street drugs. Combining risperidone with these substances can decrease how well risperidone works for you and/or make you feel excessively sleepy.

If your child is sleepy during the day and this is interfering with school or activities, notify the doctor who may change the dose or time when it is taken. If your child is old enough to drive they should not drive if risperidone is making them sleepy.



What special instructions should I follow while using risperidone?

- Keep all appointments with your doctor and the laboratory. At this time, it is recommended that your doctor order certain laboratory testing (a blood test, which may include checking blood glucose, insulin and prolactin levels, cholesterol and triglyceride levels and liver tests) before risperidone is prescribed. Your physician will decide with you how often this testing needs to be repeated (usually once yearly, at minimum) in order to check how you are responding to **risperidone**.
- In addition to the laboratory testing above, measurement of height, weight and waist circumference before starting **risperidone** and at regular intervals is recommended.
- Do not allow anyone else to use your medication.
- If you experience any abnormal movements in your arms, legs, body or face, tell your doctor as soon as possible.

What should I do if I forget to take a dose of risperidone?

If you take risperidone only at bedtime and you forget to take it, skip the missed dose and continue with your schedule the next day. **DO NOT** double your next dose.



What storage conditions are needed for risperidone?

- Keep this medication in the original container, stored at room temperature away from moisture and heat (e.g., not in the bathroom).
- Store dissolving tablets in the original sealed packaging and use immediately once opened.
- Keep this medication out of reach from other children.

References

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