Giving your child Intranasal Midazolam using a Nasal Atomizer

What is midazolam?
Midazolam is a medication used to stop seizures. One form of midazolam is a mist that is sprayed into the nose using a Mucosal Atomization Device (MAD). This is called intranasal midazolam. The medication is quickly absorbed through the lining of the nose and enters the bloodstream.

When should I give my child midazolam?
Give this medication only when your child needs it. Your neurologist, nurse practitioner or nurse will tell you when to give your child this medication.

Your child’s dose of midazolam is ______ ml in each nostril.

Give one dose of midazolam after ________ minutes.

Give a second dose of midazolam if the seizure does not stop after ____ minutes and CALL 911.

If your child has been prescribed other rescue medications to stop seizures such as lorazepam (Ativan®) or diazepam (Diastat®), please check with your doctor or pharmacist before using midazolam.

In most cases, children should only receive one kind of rescue medication for seizures.

What are the possible side effects of midazolam?
This medication may make your child drowsy, dizzy, or less alert than normal. Rarely, a child may become hyperactive or irritable (grumpy). Check with your child's doctor if the side effects do not go away.

- trouble breathing
- severe drowsiness or confusion
- shortness of breath
- severe weakness
- chest pain or pressure
- slurred speech
- seizures that do not stop

Call your child’s doctor right away or take your child to the nearest hospital Emergency Department if your child has:

What other important information should I know about midazolam?
- Do not share your child’s medication with others. Do not give anyone else’s medication to your child.
- Make sure you always have enough midazolam to last through weekends, holidays, and vacations. Call your pharmacy at least 2 business days before if you are running low on midazolam, as not all pharmacies have this medication available.
- If your child takes too much midazolam, call the Ontario Poison Centre at 1-800-268-9017.

If you have any questions about this medication, please speak with your doctor, nurse, nurse practitioner or pharmacist.
How do I give my child intranasal midazolam?

1. Get supplies ready

- Mark the syringe with tape or a marker at the level where the medication needs to be drawn up to.

2. Prepare the syringe with midazolam

- Remove the plastic cap off the vial of medication.
- Connect the needle to the syringe and twist to secure.
- Remove the needle cap.
- Stick the needle through the rubber seal of the vial.
- Flip the vial upside down and hold down the plunger.
- Look inside the vial to see that the tip of the needle is within the liquid. If it is not, move the needle until the tip is fully in the liquid. (See Figure A).
- Pull back on the syringe plunger to fill the syringe with medication until the liquid reaches the marked line and let the syringe fill with medication.
- Give the exact dose as prescribed. This dose was calculated to be the right amount for your child’s size and weight.
- Replace the needle cap. Twist off the needle from the syringe.
- Safely dispose of the needle in a sharps container.

3. Give your child a dose of midazolam using the MAD

- Attach the MAD to the syringe and twist to secure.
- Look inside your child’s nose. If there is a lot of mucous or blood, remove using a tissue.
- Make sure your child is lying down on their back or side.
- Hold the top of your child’s head as still as possible and place the MAD into the nostril. The tip of the MAD should rest snugly inside the nostril, aiming up and outward (toward the top of the ear).
- Push the syringe plunger down rapidly and forcefully to quickly give your child one dose of the medication.
- After giving the dose, hold the MAD in the nostril for 5 to 10 seconds.
- Repeat with the other nostril, if the medication needs to be split between both nostrils.
- Remove the MAD and wash hands.

Give a second dose only if directed by your child’s doctor

- Your child’s doctor may decide that it is safe to repeat a dose of midazolam if the first dose does not work.
- If the doctor has told you to repeat the dose, follow the same instructions to draw up and give the next dose.

How do I store midazolam and the MAD?

- Keep midazolam in a safe place, where children cannot see it or reach it. Store it at room temperature in a cool, dry place away from sunlight. Do not store it in the refrigerator, bathroom or kitchen.
- Once opened, a vial of midazolam can be used for up to 28 days. After 28 days the vial must be thrown out, even if there is still some medication remaining. You may want to write down when the vial was first opened.
- The MAD may be reused by the same child. After using the MAD, rinse it well with water. Let it air dry. Store in a clean, dry place.
How do I give my child intranasal midazolam?

1 Get supplies ready

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2 Prepare the syringe with midazolam

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6. Look inside the vial to see that the tip of the needle is within the liquid. If it is not, move the needle until the tip is fully in the liquid. (See Figure A).
7. Pull back on the syringe plunger to fill the syringe with medication until the liquid reaches the marked line and let the syringe fill with medication.

Give the exact dose as prescribed. This dose was calculated to be the right amount for your child’s size and weight.

8. Replace the needle cap. Twist off the needle from the syringe.
9. Safely dispose of the needle in a sharps container.

3 Give your child a dose of midazolam using the MAD

1. Attach the MAD to the syringe and twist to secure.
2. Look inside your child’s nose. If there is a lot of mucous or blood, remove using a tissue.
3. Make sure your child is lying down on their back or side.
4. Hold the top of your child’s head as still as possible and place the MAD into the nostril. The tip of the MAD should rest snugly inside the nostril, aiming up and outward (toward the top of the ear).
5. Push the syringe plunger down rapidly and forcefully to quickly give your child one dose of the medication.
6. After giving the dose, hold the MAD in the nostril for 5 to 10 seconds.
7. Repeat with the other nostril, if the medication needs to be split between both nostrils.
8. Remove the MAD and wash hands.

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