What is midazolam?

Midazolam belongs to a group of medications called benzodiazepines. It is a short-acting sedative that can be used in the emergency treatment of seizures.

When is it used for seizures?

Midazolam is prescribed for some people who experience severe, cluster or prolonged seizures. Outside of the hospital setting, it is given via the nose (intranasal) or into the space between the cheek and teeth (buccal). A test dose is recommended prior to use in other than medical settings.

What is the doctor’s role?

The doctor’s role includes:

- Giving written instructions that cover:
  - the prescribed dosage to be given.
  - a clear description of the seizure(s) for which the midazolam has been prescribed.
  - when and how the midazolam is to be given.
  - At what stage of the seizure or procedure you are to call an ambulance.
- Arranging training for safe administration.
- Discussing the implications and potential side-effects of using midazolam.

What is your role?

Your role is to ensure that you:

- Can recognize the person’s seizure(s) for which the midazolam has been prescribed.
- Understand the doctor’s written instructions - if unsure ask the doctor to explain.
- Are trained to give midazolam and that your training is reviewed annually.
- Are competent in performing mouth to mouth resuscitation should it be required.
- Know how to observe and record seizures.
MIDAZOLAM – PLASTIC AMPOULES

What to do

1. Remain calm.
2. Stay with person.
3. Time the seizure.
4. Protect from injury.
5. Give midazolam and/or call an ambulance as stated in the doctor’s written instructions.

Preparing the midazolam

1. Check the written instructions.
2. Check the ampoule for medication name, dose and expiry date.
3. If using a plastic ampoule to administer, twist the top to open and safely discard any excess midazolam before giving the prescribed amount.
4. If using a syringe, draw up only the prescribed amount.

Intranasal

Position the person on their back so the head is tilted back. This may require placing a pillow under the shoulders. To give, hold the ampoule or syringe over the nostril, gently squeeze and drip the midazolam, 2-3 drops at a time, into one nostril then the other.
Buccal

**Position** the person **on their side** in the recovery position. **To give**, insert the ampoule or syringe between the inside of the lower cheek and the teeth. Gently squeeze the ampoule or syringe until the prescribed amount has been given.

After giving

1. Place the person on their side in the recovery position.
2. Stay with the person until they have recovered.
3. Once the seal is broken the midazolam must be used immediately or safely discarded.
4. Write down when and how much midazolam you have given.

Call an ambulance

- If you are in any doubt what to do.
- If an injury has occurred.
- As stated in the doctor’s written instructions.

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What are the possible side effects?

- Drowsiness.
- Headache, weakness, tiredness.
- Irritation and stinging in the nostrils (intranasal).
- Altered mood and balance (giggly, hyperactivity, unsteady on feet).
- Confusion and disorientation can occur after a seizure or having midazolam.
**MIDAZOLAM – PLASTIC AMPOULES**

**Very rarely**, the person’s breathing may become more shallow and slower. If this happens, call an ambulance as they may need mouth to mouth resuscitation. It is important that you know how to perform mouth to mouth resuscitation yourself. *If you are worried about any side-effects, discuss with the doctor.*

**How is midazolam packaged?**
Midazolam for intranasal or buccal administration comes in a plastic ampoule with a twist top that is easily removed or in glass ampoules labelled with:
- Medication name – brand and generic
- Dose (mg) and volume of solution (mL)
- Expiry date
- These ampoules are labelled “For slow IV or IM injection” but are also suitable for intranasal or buccal use.

**How should midazolam be stored?**
- In a locked cupboard, out of children’s reach.
- Below 25°C.
- Do not leave ampoules in a hot location such as in your car.

**What about other medications?**
Sometimes medications interact with each other. It is important to tell the doctor and pharmacist about any other medications being taken including over the counter and herbal medicines. Always check before using new medications.

**Other important information**
- It is important to ensure you have adequate supplies of midazolam at all times.
- Check the expiry date of the midazolam regularly. Return expired ampoules when obtaining new stock. *Once it has expired, it may not be as effective or safe to use.*
- A seizure management plan and emergency medication procedure need to be prepared and training arranged for any organisation required to give midazolam.

**For more information, contact** your doctor, specialist or pharmacist.

**Epilepsy Action service providers who are Registered Nurses are available to provide training and education sessions.**

For assistance in developing this pamphlet, Epilepsy Action Australia thanks:
- Dr M Harbord, Flinders Medical Centre, Adelaide
- Women’s and Children’s Hospital, Adelaide
- The Children’s Hospital, Westmead

This information is given to provide accurate, general information about epilepsy. Medical information and knowledge changes rapidly and you should consult your doctor for more detailed information. This is not medical advice and you should not make any medication or treatment changes without consulting your doctor.