

# Medicines Safety Bulletin

April 2025

## Giving medicines on time: Pyridostigmine in myasthenia gravis



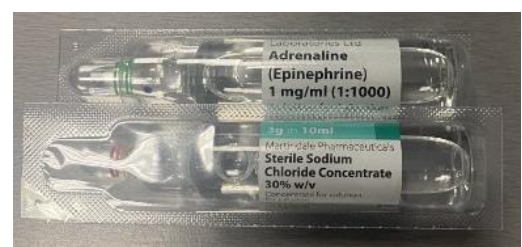
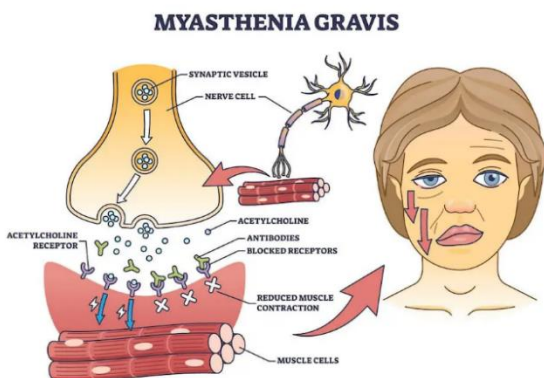
Pyridostigmine is a critical medicine for people who live with myasthenia gravis. As it is cleared from the body very rapidly, the duration of action of a dose is only three to four hours. Because of this, pyridostigmine must be given on time (i.e. within 30 minutes of the due time), even when the dose timing does not fit with usual ward medicines rounds. Medicine doses administered too late may result in excessive weakness and even the inability to swallow. A missed or late dose can precipitate [myasthenic crisis](#), which can be fatal.

Pyridostigmine inhibits the action of the enzyme acetylcholinesterase, so prolonging the action of acetylcholine in the neuromuscular junction. More acetylcholine in the neuromuscular junction results in stronger muscle contractions and less muscle weakness and increased strength of muscles involved in eye movements, limb movements, swallowing and breathing.

### Advice for staff:

- Always give pyridostigmine at the time prescribed
- Read your Trust's Omitted Doses and Critical Drugs guideline
- If a medicine is not available, contact the nurse and pharmacist to ensure it can be obtained promptly
- Refer to [www.myaware.org/drugs-to-avoid](http://www.myaware.org/drugs-to-avoid) to consult the list of drugs which are contraindicated in a patient with myasthenia gravis, including antibiotics. [Tips for nurses are also available](#)

## Look-alike medicines: adrenaline and sodium chloride 30% ampoules



The inner and outer packaging for some medicinal products can look very similar. Size, colour, text font, manufacturer logo and ampoule volume may be identical or near identical.



In a recent safety event, adrenaline 1:1000 and sodium chloride 30% ampoules were mistakenly returned to the same box because they looked so alike.

Adrenaline is used in emergencies to treat shock and severe allergic reactions. Sodium chloride 30% is hypertonic saline and is used to manage brain injuries and also sodium imbalances in critically ill patients.

#### Advice for staff:

- When returning medicines to the original box, check the drug, dose, strength of the ampoules and the box in the same way you would before administration
- When a patient is on several medications, prepare one dose of one medicine at a time
- Remove the exact quantity of medication from the outer packaging to make up the required dose (so as to avoid having to return any).

## Typical antipsychotic depot excipients and allergies

A patient was prescribed flupentixol decanoate, despite having a documented anaphylactic reaction to coconuts and nuts. First-generation, or 'typical' antipsychotic depots are formulated with oils that may be allergenic for some patients.

- Flupentixol decanoate (Depixol) and zuclopenthixol decanoate (Clopixol) are based on thin vegetable oil derived from coconuts
- Haloperidol decanoate (Haldol) is based on sesame oil.

#### Advice for staff:

- A test dose of these formulations is required for patients who have not received them before. This test dose serves the dual purpose of testing a patient's sensitivity to extra-pyramidal side effects, but also any sensitivity or allergy to the base oil. Test dose recommendations are given in the Maudsley Prescribing Guidelines
- Second-generation, 'atypical' antipsychotic long-acting injections are not suspended in oil and do not require test doses

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