

COMPETENCY CHECKLIST

for the administration of Buccal (Oromucosal) Midazolam



Included in this document:

- Introduction.
- Purpose of document.
- Criteria for role of a Reviewer.
- Information on Buccal (Oromucosal) Midazolam.
- Checklists:
 - Caregiver form without example answers.
 - Reviewer form with example answers including : Typical questions and example answers to establish the caregivers knowledge of seizures and the safe administration of the Buccal (Oromucosal) Midazolam.
- Optional case studies and space for a personalised case study.



Introduction

Epilepsy is common and, at times, a life limiting neurological condition. This condition requires regular medical review and careful seizure management^{5,8}.

The Care Quality Commission: CQC England, Care Inspectorate Wales, Care Inspectorate Scotland and the Regulation and Quality Improvement Authority Northern Ireland, are responsible for reviewing the standards of health and care facilities across the UK. Part of this process is to guarantee that professional caregivers receive up to date training in all aspects of care which includes epilepsy and medicines management⁷.

Training in epilepsy care varies across the UK, thus in 2019 the Epilepsy Specialist Nurse Association (ESNA) developed the best practice guidelines for training in the administration of Buccal (Oromucosal) Midazolam⁴. These were endorsed by the International League Against Epilepsy (ILAE) and Royal College of Psychiatrists (RCPSYCH). Its aim is to ensure caregivers receive a high standard of clinical training so that they can skilfully support people with epilepsy and safely administer Buccal (Oromucosal) Midazolam. This can take place either in the person's own home, education³, health or social care setting. ESNA recommended that training takes place at least every 2 years depending on the competency of the caregiver.

The best practice guidelines recommend that following the training, caregivers are offered a test. This test does not guarantee competency, as it only captures a snapshot of their understanding on the day. According to CQC, it is therefore the responsibility of the care providers/registered managers to ensure caregiver competency².

This document is a guided checklist to help care providers ensure that their caregivers are competent to safely administer Buccal (Oromucosal) Midazolam. It can be used either immediately after epilepsy and emergency medication training, following an incident, or as part of an ongoing appraisal.

It can also prove helpful as part of an organisational risk assessment and best practice evidence for care inspectorates.

This document only applies to the administration of Buccal (Oromucosal) Midazolam, but it can be adjusted to a variety of care settings and can be branded with individual organisational logos. It offers example questions and there is space to add personalised case studies for additional learning.



Purpose of Document:

This document is a checklist to help determine the competency of a caregiver who has been trained to administer Buccal (Oromucosal) Midazolam, to a person with prolonged or clustering convulsions. Although in some situation's Buccal (Oromucosal) Midazolam may be prescribed for different seizure types.

Glossary:

- Reviewee - Caregiver being reviewed.
- Reviewer - Person reviewing the caregiver.
- Individual - Person with epilepsy, service user with epilepsy, patient with epilepsy.
- Caregiver - Professional carer or nurse. * Family members are often voluntary caregivers; this checklist may be a useful tool to ascertain their understanding of this medication and method of administration.
- Competency - When a person has sufficient skills to perform a specific task.
- Protocol - A person-centred document to guide the caregiver through step by step decision making. This may also be known as an "emergency seizure care plan" or "guideline." It is important that caregivers become familiar with this document before administering Buccal (Oromucosal) Midazolam.
- Emergency services - Ambulance or Paramedics.
- Convulsions - Tonic clonic seizures (for example: loss of consciousness, eyes open, limb stiffening, full body rhythmical jerking, sometimes excessive salivation, and/or incontinence).
- Buccal - Inside lower cheek.
- MAR - Medication Administration Record.
- PRN - "Pro Re Nata" as required medication.
- Half-life -The half-life of a drug is the time it takes for the amount of it in your body to be reduced by half.
- T.E.P.A.M. - Time, Equipment, Protocol, Administration and Monitor. This is an Acronym which is a useful tool used to shorten and avoid the repetitive use of long sentences or phrases frequently used to describe a situation.
- ESNA - Epilepsy Nurse Association.
- ILAE - International League Against Epilepsy.
- RCPYSCH- Royal College of Psychiatrists.

Audience:

Community based care and nursing providers, although this document can be modified to suit a variety of settings including in a person's own home, education, or a hospital setting.



Criteria for the role of the reviewer:

- A person who has the knowledge and experience of epilepsy care and evidence of up to date epilepsy, seizure first aid and emergency medication training as recommended by ESNA 2019³. They will be selected and deemed competent by their registered manager/organisation².
- A person who has successfully completed medication management training and first aid/basic life support training.
- A person who understands the principle of safe administration of Buccal (Oromucosal) Midazolam.
- A person who can provide constructive feedback.
- A person who can raise concerns, if they feel that there is inadequate knowledge and failure to follow the protocol for the safe administration of Buccal (Oromucosal) Midazolam.



Buccal (Oromucosal) Midazolam information

What is Buccal (Oromucosal) Midazolam?

Buccal (Oromucosal) Midazolam is a prescription only medication. It belongs to a group of medicines known as benzodiazepines. Benzodiazepines have sedative or tranquilising properties that work directly on neurones (brain cells) to quieten their action. Benzodiazepines enhance a "calming" chemical called GABA and is prescribed to help relax muscles, reduce insomnia, decrease anxiety, and stop seizures. It is short acting and has a half-life of 2-5 hours.

NICE⁵ and SIGN⁸ recommend that Buccal (Oromucosal) Midazolam is the first line treatment for prolonged convulsive seizures lasting more than 5 mins or a cluster of 3 or more convulsions in an hour. This medication is sometimes prescribed for different seizure types, such as focal cluster seizures where administration of emergency oral (tablet) medication is difficult.

Buccal (Oromucosal) Midazolam is currently licenced and available in the UK as Buccolam Hydrochloride (water soluble) and Epistatus Maleate (slightly more viscous solution). Both are available as prefilled syringes, suitable for ages ranging from 3 months to 18 years for Buccolam and currently 10-18 years for Epistatus. Individuals over 18 years can be administered this medication if prescribed by a specialist doctor, nurse prescriber or GP.

What you need to know before you use Buccal (Oromucosal) Midazolam:

Before Buccal (Oromucosal) Midazolam is prescribed it is important that the individual does not:

- Have an allergy to Midazolam or other benzodiazepines.
- Have a condition called 'Myasthenia Gravis' (which causes muscle weakness).
- Have severe breathing problems – such as severe asthma or COPD.
- Have sleep apnoea syndrome (which causes breathing to be frequently interrupted during sleep).
- Have severe liver problems.
- Currently take opioid medication (unless no alternative)¹.

Before administering Buccal (Oromucosal) Midazolam please ensure that:

- The individual is prescribed the medication and an emergency protocol is in place.
- Caregivers are appropriately trained and competent to administer the medication safely to an individual in a seizure.
- The individual has not been administered the medication within the previous 24 hours (unless this is a prescribed second dose).
- The individual is in a suitable position for administration, for example remaining seated in a wheelchair, or if laying down ensuring they are safely on their side where possible.



How to give Buccal (Oromucosal) Midazolam:

T.E.P.A.M. is an acronym developed to help you remember the sequence for administering Buccal (Oromucosal) Midazolam.

It is important to have an up to date emergency protocol for administering this medication. This document together with seizure care plans is necessary to ensure safe management of epilepsy.

Step one - **Time** the seizure, if this is prolonged or clustering Buccal (Oromucosal) Midazolam may require administering. Ensure the individual is in safe place, if laying down and movements allow, turn them safely on their side. (Lone workers will have to leave the patient in a safe position alone, whilst continuing with step two).

Step two - **Equipment** - gather all that is needed to administer the medication, this includes the medication, personal protective equipment (PPE) and documentation including the protocol.

Step three - **Protocol** - The instructions in the protocol must be closely followed before administering medication. Caregivers should be familiar with this document before supporting the individual.

Step four - **Administer** the medication as prescribed at the time indicated in the protocol. Twist off and remove sheath or cap from the prefilled syringe, dispense the liquid medication slowly into the lower cheek (Buccal) cavity (half the dose in each cheek if able).

Step five - **Monitor** the individual until they have recovered. They will need ongoing monitoring for up to 24 hours. Document the seizure description and medication administration. Do this as soon as the seizure is over, and the individual is safe.

***Remember** – It is important to call emergency services if this is the **first time** the individual has been administered this medication or if they are **still convulsing 5 mins** after the administration⁹.

*A second dose may be prescribed in some cases. The dose and timings should be clearly written in the individual's protocol and may differ to national guidelines.



Possible side effects of Buccal (Oromucosal) Midazolam

- Drowsiness, tiredness, fatigue* (*this can also be an experience following a non-prolonged seizure).
- Confusion or feeling disorientated*.
- Losing co-ordination*.
- Developing muscle weakness*.
- Low blood pressure – causing dizziness and fainting.

Adverse effects (rare) that will require emergency assistance:

- Severe breathing difficulties and "coma" like state.
- Cardiac problems, no or faint pulse.

*Remember if you have any concerns that you feel you are unable to manage please seek emergency medical assistance.

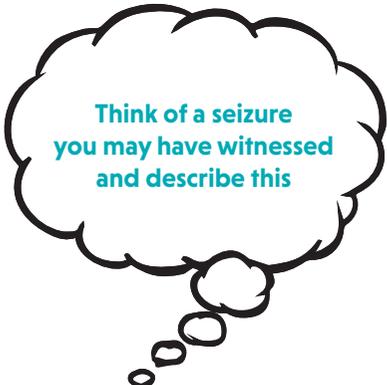
How to store Buccal (Oromucosal) Midazolam

- Buccal (Oromucosal) Midazolam is currently (2020) a schedule 3 control drug and legally it does not require storage in a control drug (CD) cupboard. However, many care organisations choose to securely store all medicines, to ensure safe keeping.
- Do not store in the fridge or freezer, or above 25°C. Room temperature is best.
- Store in the original packaging to protect from light.
- Do not use this medicine after expiry date stated on label. The expiry date refers to the last day of that month.
- Do not give if the product has been damaged or if the solution is not clear (e.g. cloudy or white crystal-like particles are present).

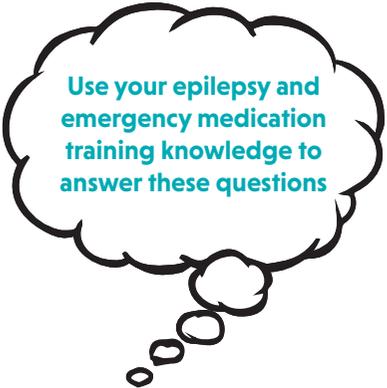


Competency document (for Reviewee)

Administering Buccal (Oromucosal) Midazolam

Name of reviewee:				Date:
Name of reviewer:				Date:
Epilepsy training provided by:				Date training completed:
Learning objectives	Questions to ask	Checklist answers	Tick box	Comments
<p>1. Knowledge of seizures and first aid</p> 	a) How would you describe an individual's seizure to a new member of staff?	The reviewee should be able to describe a seizure:	<input type="checkbox"/>	
	b) What actions would you take if an individual has a seizure?	The reviewee should be able to describe how to support an individual in a seizure:	<input type="checkbox"/>	

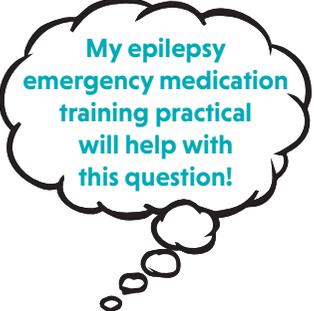


	c) What are the possible challenges and what would you do?	The reviewee should be able to identify one typical challenge:	<input type="checkbox"/>	
<p>2. Understanding the Buccal (Oromucosal) Midazolam protocol</p> 	<p>a) Why would an individual require a protocol?</p> <p>b) Where would you find the protocol?</p>	<p>The reviewee is expected to know why an individual needs a protocol:</p> <p>The reviewee is expected to know how to locate the protocol in an emergency:</p>	<input type="checkbox"/> <input type="checkbox"/>	



	<p>c) What action would you take if the protocol is out of date?</p>	<p>The reviewee is expected to know what action to take if protocol is out of date:</p>	<input type="checkbox"/>	
	<p>d) When would you administer the Buccal (Oromucosal) Midazolam?</p>	<p>The reviewee would be expected to know when the individual requires this medication:</p>	<input type="checkbox"/>	
	<p>e) When would a second dose be required?</p>		<input type="checkbox"/>	
	<p>f) What are the rare adverse effects to look out for?</p>	<p>The reviewee would be expected to know the two potential adverse effects from the medication and what to do:</p>	<input type="checkbox"/>	



<p>3. Knowing how to time a seizure and why is it important?</p>	<p>a) How would you reliably time a seizure?</p>	<p>The reviewee would be expected to understand how to time a seizure and why it is important:</p>	<input type="checkbox"/>	
<p>4. Practical administration of Buccal (Oromucosal) Midazolam</p> 	<p>a) Talk through how you would administer Buccal (Oromucosal) Midazolam to an individual having a prolonged seizure?</p>	<p>The reviewee would be expected to clearly explain the procedure of safely administering the medication:</p>	<input type="checkbox"/>	



5. Knowledge of accessibility, safe storage, recording and disposal of Buccal (Oromucosal) Midazolam



a) Talk through how to access this medication and how it should be stored?

b) Where would you record the information about Buccal (Oromucosal) Midazolam?

c) How would you dispose of out of date medication?

The reviewee should have knowledge of, or at least be able to refer to organisational policy/procedure:



Comments from Reviewer:

Further training recommended:

Yes

No

Reviewer signature:

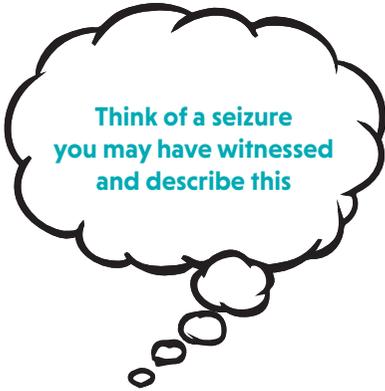
Reviewee signature:

Date:

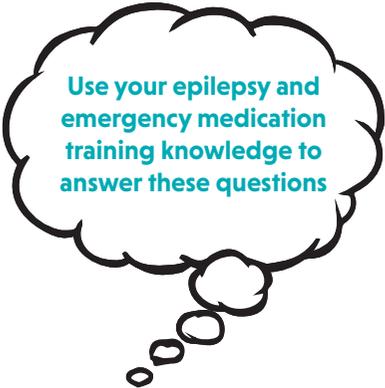


Competency document (for Reviewer only)

Administering Buccal (Oromucosal) Midazolam

Name of reviewee:				Date:
Name of reviewer:				Date:
Epilepsy training provided by:				Date training completed:
Learning objectives	Questions to ask	Checklist answers	Tick box	Comments
<p>1. Knowledge of seizures and first aid</p> 	a) How would you describe an individual's seizure to a new member of staff?	<p>The reviewee should be able to describe a seizure, for example: <i>"He has seizures where he usually cries out, his head turns to the right, his eyes roll upwards, all limbs stiffen and start jerking, this usually lasts 3 mins, he can wet himself or bite his tongue."</i></p>	<input type="checkbox"/>	
	b) What actions would you take if an individual has a seizure?	<p>The reviewee should be able to describe how to support an individual in a seizure, for example: <i>"I would shout for help, and start timing the seizure. I would make sure he was safe and not going to hurt himself. I would cover him up to ensure dignity and then when possible, I would put him on his side and stay with him until fully recovered."</i></p>	<input type="checkbox"/>	

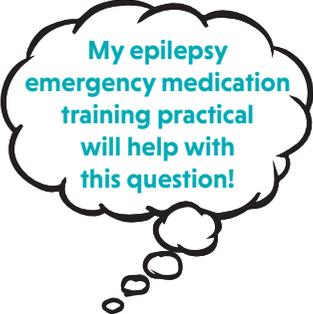


	<p>c) What are the possible challenges and what would you do?</p>	<p>The reviewee should be able to identify one typical challenge, for example: <i>"If I were on my own and had two other individuals to care for. I would ensure the individual was safe and call for back up from my colleagues in accordance with our organisational policies."</i></p> <p>NB: essential caregivers have access to a mobile/telephone.</p>	<p><input type="checkbox"/></p>	
<p>2. Understanding the Buccal (Oromucosal) Midazolam protocol</p> 	<p>a) Why would an individual require a protocol?</p> <p>b) Where would you find the protocol?</p>	<p>The reviewee is expected to know why an individual requires a protocol, for example: <i>"They have prolonged convulsive seizures that do not stop without the use of emergency epilepsy medication; therefore, their protocol will explain the dose, time and how to safely administer the medication."</i></p> <p>The reviewee is expected to know how to locate the protocol in an emergency, for example: <i>"In the medication cupboard if within a care organisation, with the MAR chart, PRN chart and/or individual's file. Or in individual's own bedside cupboard or in their own bag." This is an emergency medication so should always be close by."</i></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	



	<p>c) What action would you take if the protocol is out of date?</p>	<p>The reviewee is expected to know what action to take if protocol is out of date, for example: <i>"This protocol should not be out of date as it is our duty to ensure they are reviewed and updated. I would contact either our on-call staff or GP/Nurse specialist to advise."</i> <i>"Medication should not be given if out of date, I would call 999 if it was."</i></p>	<p><input type="checkbox"/></p>	
	<p>d) When would you administer the Buccal (Oromucosal) Midazolam?</p>	<p>The reviewee would be expected to know when the individual requires this medication, for example: <i>"The protocol will tell me when to administer the emergency medication, I should not guess."</i></p>	<p><input type="checkbox"/></p>	
	<p>e) When would a second dose be required?</p>	<p><i>"Only if the protocol says to give a second dose, if not then I would not give a second dose."</i></p>	<p><input type="checkbox"/></p>	
	<p>f) What are the rare adverse effects to look out for?</p>	<p>The reviewee would be expected to know the two potential adverse effects from the medication and what to do, for example: <i>"1) Trouble waking them up after the administration, 2) difficulty breathing, - I would call emergency services."</i></p>	<p><input type="checkbox"/></p>	



<p>3. Knowing how to time a seizure and why is it important?</p>	<p>a) How would you reliably time a seizure?</p>	<p>The reviewee would be expected to understand to time a seizure and why it is important, for example; <i>"When I notice the seizure, I would start timing, I would use my watch, stopwatch or clock. I would shout it out loud, as it may help me remember when it started. Then as soon as the individual is breathing and recovering again, I can stop timing, but I need to write it down soon after."</i></p> <p><i>It is important to time all seizures, particularly a convulsion, to ensure that if it lasts longer than five minutes, it is treated as a medical emergency.</i></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	
<p>4. Practical administration of Buccal (Oromucosal) Midazolam</p> 	<p>a) Talk through how you would administer Buccal (Oromucosal) Midazolam to an individual having a prolonged seizure?</p>	<p>The reviewee would be expected to clearly explain the procedure of safely administering the medication, for example: <i>Optional acronym sequence answer: Time the seizure, Shout it out. Equipment get it ready – the medication, protocol, and PPE. Protocol, read it thoroughly before administration. Administer the correct dose when the protocol tells me to, slowly and safely into their lower cheek cavity. Lie them on their side where possible. Monitor the individual closely for any adverse effects. Record and document. Continue to monitor for 24-hours.</i></p>	<p><input type="checkbox"/></p>	



<p>5. Knowledge of accessibility, safe storage, recording and disposal of Buccal (Oromucosal) Midazolam</p> 	<p>a) Talk through how to access this medication and how should it be stored?</p> <p>b) Where would you record the information about Buccal (Oromucosal) Midazolam?</p> <p>c) How would you dispose of out of date medication?</p>	<p>The reviewee should have knowledge of or at least be able to refer to organisational policy/procedure, for example:</p> <p><i>"Ensure keys for the medication cupboard are easily accessible by the person designated to administer the Buccal (Oromucosal) Midazolam, or this may hinder administration."</i></p> <p><i>"Medication maybe kept in a locked medication cupboard, kept with the individual or within individual's own home. At room temperature (not in fridge)."</i></p> <p><i>"Record administration of Buccal (Oromucosal) Midazolam in appropriate file (according to your organisational procedures) such as MAR chart, PRN sheet, and handover information to the next staff member who will be caring for the individual."</i></p> <p><i>"Always check expiry date. Any out of date medication to be returned to pharmacy and a record kept of this."</i></p>	<p><input type="checkbox"/></p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	
--	--	---	---	--



Case study 1 - Amira

The following case studies are designed to represent typical scenarios that a caregiver may experience. These are optional. If preferred; there is space provided for a personalised case study. These can help the caregiver understand different situations that may arise.

Case Study 1 – Amira

Amira is a 37-year-old woman with severe learning disabilities and has had difficult epilepsy since childhood. Amira cannot verbally communicate. She lives in an adapted bungalow and is assisted by two carers 24hrs a day.

Amira takes three anti epilepsy medications. She has experienced prolonged convulsions and clusters fifteen times within the last few years. Buccal Midazolam in the form of Buccolam® (hydrochloride, box of four, prefilled syringes) is therefore her prescribed rescue medication.

Amira came home from having lunch out and was resting on her bed. Her carer noticed that Amira suddenly screamed out, her head turned to the left, her limbs became stiff and started to jerk rhythmically. After a few minutes Amira stopped jerking, she relaxed, but soon began gasping. Amira did not fully regain consciousness before she started jerking again, the jerks continued for another few minutes.

Talk me through what you would do?



Case study 1 - Amira

Case Study 1 – Amira

Amira is a 37-year-old woman with severe learning disabilities and has had difficult epilepsy since childhood. Amira cannot verbally communicate. She lives in an adapted bungalow and is assisted by two carers 24hrs a day.

Amira takes three anti epilepsy medications. She has experienced prolonged convulsions and clusters fifteen times within the last few years. Buccal Midazolam in the form of Buccolam® (hydrochloride, box of four, prefilled syringes) is therefore her prescribed rescue medication.

Amira came home from having lunch out and was resting on her bed. Her carer noticed that Amira suddenly screamed out, her head turned to the left, her limbs became stiff and started to jerk rhythmically. After a few minutes Amira stopped jerking, she relaxed, but soon began gasping. Amira did not fully regain consciousness before she started jerking again, the jerks continued for another few minutes.

Talk me through what you would do? Example answers:

- **T**ime the seizure and make sure she is safe, call for assistance if possible. Note that she is having clusters.
- **E**quipment - get it ready, protocol, Buccal (Oromucosal) Midazolam, and PPE
- **P**rotocol - read and understand it- be guided on what to do next.
- **A**dminister the medication as per the protocol. It will tell you when, the correct dose and maximum dose for her cluster seizures, and when to call for emergency services.
- **M**onitor the person. Is she recovering properly? Is she on her side safely? **Complete documentation.**

If she continues to convulse 5 mins after her max dose of Buccal (Oromucosal) Midazolam is given, call for emergency services to help unless of course they are already on their way.



Discussion - Case study 1 - Amira



Case study 2 - Peter

A Case Study 2 - Peter

Peter is 17 and has epilepsy, learning disabilities, and cerebral palsy. He has a PEG feed in place due to some swallowing difficulties. He does however have thickened foods on occasions. Peter spends much of his time in his specially moulded wheelchair and has an hour a day using a standing frame and physiotherapy. Peter is taking two daily epilepsy medications and is prescribed Epistatus[®] (Maleate, single prefilled Buccal Midazolam) as this is slightly "stickier" solution and comes in a smaller volume 1ml prefilled syringe. Peter's previous prolonged convulsion occurred 6 months ago when he had a chest infection.

Peter's care home is currently in lockdown due to Covid 19 virus. He is unable to socialise outside of his home or attend his college. Peter has become quite depressed as he misses his routine and family. This has caused everyone much anxiety.

On Monday morning his keyworker noticed that Peter was feeling quite clammy and sniffly. The Doctor suggested giving him 4 hourly paracetamol and to monitor him, but to keep him isolated away from the other residents. Full PPE was needed when supporting Peter.

Thursday around 4 am the night nurse came to routinely check on Peter, he woke and began to cry, the nurse gave him reassurance. Peter suddenly yelled out, his head turned to the right, eyes were staring up to the right. His limbs were stiff and quickly started jerking.

Talk me through what you would do?



Case study 2 - Peter

A Case Study 2 - Peter

Peter is 17 and has epilepsy, learning disabilities, and cerebral palsy. He has a PEG feed in place due to some swallowing difficulties. He does however have thickened foods on occasions. Peter spends much of his time in his specially moulded wheelchair and has an hour a day using a standing frame and physiotherapy. Peter is taking two daily epilepsy medications and is prescribed Epistatus® (Maleate, single prefilled Buccal Midazolam) as this is slightly "stickier" solution and comes in a smaller volume 1ml prefilled syringe. Peter's previous prolonged convulsion occurred 6 months ago when he had a chest infection.

Peter's care home is currently in lockdown due to Covid 19 virus. He is unable to socialise outside of his home or attend his college. Peter has become quite depressed as he misses his routine and family. This has caused everyone much anxiety.

On Monday morning his keyworker noticed that Peter was feeling quite clammy and sniffly. The Doctor suggested giving him 4 hourly paracetamol and to monitor him, but to keep him isolated away from the other residents. Full PPE was needed when supporting Peter.

Thursday around 4 am the night nurse came to routinely check on Peter, he woke and began to cry, the nurse gave him reassurance. Peter suddenly yelled out, his head turned to the right, eyes were staring up to the right. His limbs were stiff and quickly started jerking.

Talk me through what you would do?

- **T**ime the seizure, put PPE on and make sure he is safe, call for assistance where possible.
- **E**quipment - get it ready, protocol, rescue medication.
- **P**rotocol - Follow this - be guided on what to do next.
- **A**dminister the medication as per the protocol, it will tell you the correct dose, time to give, and when to call for emergency services.
- **M**onitor the person. Is he recovering properly? Is he on his side? Complete documentation.



Discussion- Case study 2 - Peter



Case study 3 - Abi

Abi is a 24-year-old lady with poorly controlled epilepsy. She has three different seizure types that have been simplified as A, B and C in her epilepsy protocol. Buccal (Oromucosal) Midazolam is prescribed to be administered at 5 minutes for a prolonged A type seizure which is a tonic clonic convulsion.

Tom is a new carer supporting Abi in her own home. He has completed his epilepsy and emergency medication training but has not witnessed Abi having any seizures. One morning Tom observes a "possible seizure." He times it and when reading Abi's protocol, he notices that the seizure he is observing does not meet the description for the type A seizure. Tom is concerned as he sees that the seizure is prolonged. To be on the safe side Tom decides to administer Buccal (Oromucosal) Midazolam at 5 minutes anyway.

Was this the correct decision?

What should Tom have done?

Is this a misadministration of the medication and what action, if any, needs to be taken?



Case study 3 - Abi

Abi is a 24-year-old lady with poorly controlled epilepsy. She has three different seizure types that have been simplified as A, B and C in her epilepsy protocol. Buccal (Oromucosal) Midazolam is prescribed to be administered at 5 minutes for a prolonged A type seizure which is a tonic clonic convulsion.

Tom is a new carer supporting Abi in her own home. He has completed his epilepsy and emergency medication training but has not witnessed Abi having any seizures. One morning Tom observes a "possible seizure." He times it and when reading Abi's protocol, he notices that the seizure he is observing does not meet the description for the type A seizure. Tom is concerned as he sees that the seizure is prolonged. To be on the safe side Tom decides to administer Buccal (Oromucosal) Midazolam at 5 minutes anyway.

Was this the correct decision?

This seizure did not meet the description outlined on her emergency medication protocol and so Midazolam should not have been administered.

What should Tom have done?

Emergency services should have been contacted as it was a prolonged seizure and there was doubt/confusion about what to do.

Is this a misadministration of the medication and what action, if any, needs to be taken?

- A "safeguarding" may need to be raised.
- The incident should be discussed in a team meeting so that all staff have an opportunity to learn from the error.
- It needs to be stressed that Buccal (Oromucosal) Midazolam is not administered just on timing alone but must match up with the seizure description.
- The epilepsy protocol will need to be revisited with the epilepsy specialist or nurse as there is ambiguity over the seizure descriptions and use of Buccal (Oromucosal) Midazolam.
- Retraining of the caregivers is recommended and completion of the competency checklist.



Discussion- Case study 3 - Abi



Case study 4 - Dafydd

Dafydd is 6 years old. He has cerebral palsy and difficult to control epilepsy. He attends respite care for one weekend a month within a short break service in Cardiff.

Dafydd is not the only child with epilepsy cared for by the service. During his stay he has a prolonged 5-minute convulsive seizure. One carer, Ceri stays with him whilst a second carer Evan attempts to retrieve his protocol and Buccal (Oromucosal) Midazolam from the locked cupboard in the office. Evan cannot find Dafydd's medication. It appears his parents have forgotten to send it in. What should Evan do?

- A) Administer another child's Midazolam
- B) Contact emergency services
- C) Stay with Dafydd and monitor him, hoping the seizure will stop

How could this situation have been prevented?



Case study 4 - Dafydd

Dafydd is 6 years old. He has cerebral palsy and difficult to control epilepsy. He attends respite care for one weekend a month within a short break service in Cardiff.

Dafydd is not the only child with epilepsy cared for by the service. During his stay he has a prolonged 5-minute convulsive seizure. One carer, Ceri stays with him whilst a second carer Evan attempts to retrieve his protocol and Buccal (Oromucosal) Midazolam from the locked cupboard in the office. Evan cannot find Dafydd's medication. It appears his parents have forgotten to send it in. What should Evan do?

- A) Administer another child's Midazolam
- B) Contact emergency services
- C) Stay with Dafydd and monitor him, hoping the seizure will stop

How could this situation have been prevented?

Example Answers

B - Contact emergency services, he is in a prolonged convulsion with no access to his prescribed medication. You should never administer another child's medication. Contact his parents.

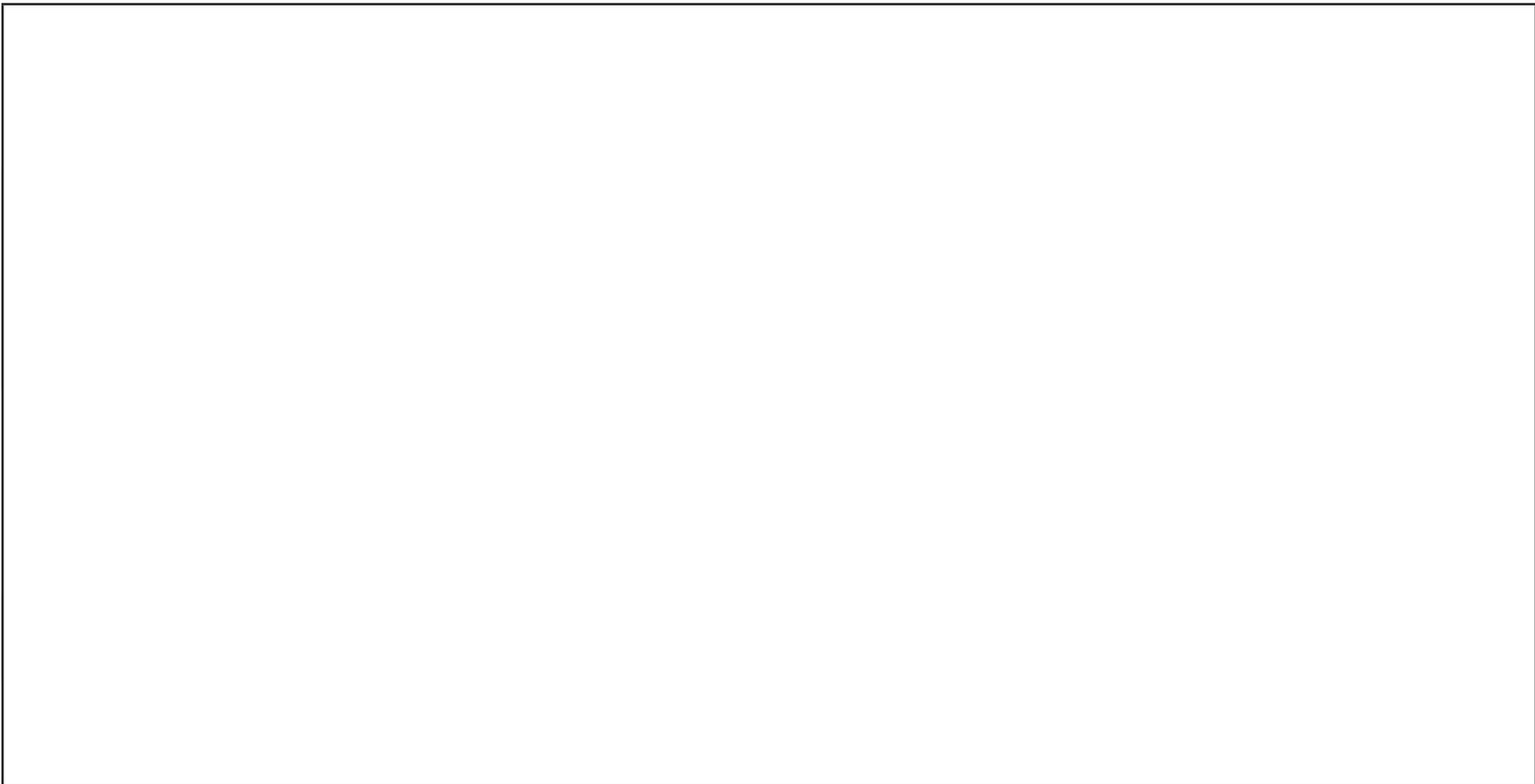
Prevented?

Policy in place to check all incoming medication into the organisation, and that it is accompanied by a protocol and not out of date.

Importantly, medication should always be kept accessible in emergencies.



Discussion- Case study 4 - Dafydd



Personalised Case study

Discussion:



Acknowledgements

Authors: Caryn Jory, Sally-Ann Remnant and Juliet Bransgrove - ESNA project task force.

Veriton Pharma Ltd (info@veritonpharma.com) for providing financial support for the development of this document.



Review and feedback thanks to:

Epilepsy Action, Epilepsy Scotland, Epilepsy Society, Quarriers Glasgow and SUDEP Action.

Better healthcare Norwich, Bowden Derra Park in Cornwall, Tresillian Residential Home, Epilepsyexplained.co.uk, Mill Lodge Respite Service in Taverham, Seeability Care UK and The Meath Epilepsy Charity in Surrey.

Kings, Kent, and Sussex epilepsy specialist nurse group.

ESNA adult and paediatric nursing members and ESNA executive committee.

Professor Rohit Shankar, Consultant Developmental Neuropsychiatrist and medical lead for the adult learning disability services for Cornwall Partnership NHS Foundation Trust.

This document will be reviewed in Feb 2022 then on a two-yearly basis unless essential.



References

1. BNF (2020) *Important safety information for all benzodiazepine medication*. <https://bnf.nice.org.uk/drug/Midazolam.html>
2. Care quality Commission (CQC) The independent regulator of health and social care in England (2020) *Training and competency for medicines optimisation in adult social care* viewed 13.11.20 - <https://www.cqc.org.uk/guidance-providers/adult-social-care/training-competency-medicines-optimisation-adult-social-care>
3. Department for Education (2015) *Supporting pupils at school with medical conditions*. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/803956/supporting-pupils-at-school-with-medical-conditions.pdf
4. Epilepsy Nurse Association - ESNA (2019) *Best practice guidelines for training professional carers in the administration of Buccal (Oromucosal) Midazolam for the treatment of prolonged and / or clusters of epileptic seizures in the community* <https://ilaebritish.org.uk/content/uploads/2019/06/ESNA-Midazolam-Guidelines.pdf>
5. National Institute for Health and Care Excellence (2012) *Epilepsies: diagnosis and management clinical guidelines (CG137)* <https://www.nice.org.uk/guidance/cg137>
6. National institute for health and Care Excellence, NICE Pathways (2020) *Treating prolonged or repeated seizures and status epilepticus*. <http://pathways.nice.org.uk/pathways/epilepsy>
7. National Institute for health and Care Excellence, (2014) *Managing medicines in care homes (SC1) 1.17 Training and skills (competency) of care home staff*. <https://www.nice.org.uk/guidance/SC1/chapter/1-Recommendations#training-and-skills-competency-of-care-home-staff>
8. Scottish Intercollegiate Guidelines Network (2018) *Diagnosis and management of epilepsy in adults, A national clinical guideline*. <https://www.sign.ac.uk/our-guidelines/diagnosis-and-management-of-epilepsy-in-adults/>

