Reference Number: *UHB 184* **Version Number:** 2	**Date of Next Review: 10/05/2027** **Previous Trust/LHB Reference Number:** *UHB 184*

Apomorphine administration to in-patients with Parkinson's Disease via alternative infusion device Procedure

Introduction and Aim

This document is to be used when a patient with Parkinson's Disease is admitted to a ward where staff are unable to use the Apogo infusion pump. This document outlines the procedure for using an alternative infusion pump – CME T34 / BD Bodyguard T syringe drivers or Fresenius Agilia syringe pump.

Objectives

- *Provide guidance for staff caring for a patient receiving apomorphine infusion who are required to use an alternative infusion device*

Scope

This procedure applies to all nursing staff in all locations including those with honorary contracts

Equality Health Impact Assessment	*An Equality Health Impact Assessment (EHIA) has been completed. The Equality Impact Assessment completed for the policy found there to be a negative/positive/no impact.*
Documents to read alongside this Procedure	*Parkinson's Disease Management Guidelines* *Parenteral Infusion Pump Policy*
Approved by	Nursing & Midwifery Board

Accountable Executive or Clinical Board Director	Jason Roberts, Executive Nurse Director
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Disclaimer

If the review date of this document has passed please ensure that the version you are using is the most up to date either by contacting the document author or the Governance Directorate.

Summary of reviews/amendments			
Version Number	**Date of Review Approved**	**Date Published**	**Summary of Amendments**
1	25/02/2013	26/04/2013	Document updated. Supersedes previous Trust procedure reference no 276
2	10/05/2025	25.09.2025	Document updated and full rewrite. Supersedes previous UHB procedure ref no 184

APOMORPHINE ADMINISTRATION TO IN-PATIENTS WITH PARKINSON'S DISEASE VIA ALTERNATIVE INFUSION DEVICE PROCEDURE

Patients who are receiving Apomorphine therapy will normally use a specific ambulatory device, the APO-GO pump, which is set up by their carers; however, staff in the acute hospital setting are not trained to use this device so an alternative (either CME T34/BD Bodyguard T or Fresenius Kabi syringe pump) is to be used.

Please see overleaf for the full procedures/checklists involved in setting up a CME T34 / BD Bodyguard T syringe driver or Fresenius Kabi syringe pump to administer Apomorphine in an acute hospital setting.

Do not alter this procedure unless advised to do so by the Parkinson's Nurse or Doctor.

Apomorphine stains green – these stains are resistant to most cleaning methods, be careful during set up and disposal of syringe.

To reduce skin irritation, it is important to alternate the site of injection/infusion daily. Three sites are used – the anterior abdominal wall and the anterior aspect of each thigh.

If you have any queries or experience any problems regarding the guidance in this document, please contact:

The Parkinson's Disease Nurse Specialist – UHL ext 24342

Clinical Engineering Help Desk – Field way ext. 45678 (for information on CME T34 / BD Bodyguard T & Fresenius Kabi syringe pump)

Pharmacy – UHW ext. 42988 or UHL ext. 25261 (for information on Apomorphine)

SETTING UP A CME T34 / BD Bodyguard T SYRINGE DRIVER FOR APOMORPHINE

1. Apomorphine is available from pharmacy in pre-filled 10ml syringes (5mg/ml)

2. Obtain CME T34/Bodyguard T from Medical Equipment Loan Service (disposables needed 30ml syringe, label, giving set, 9volt battery, Saf T Intima subcut port, clear adhesive dressing)

3. Calculate the correct volume of Apomorphine for patient's prescription (usual dosage is 4 – 7 mg/hr)
   e.g. 4.5 mg/hr over 12 hours (4.5 x 12) = 54mg = 10.8mls

4. Calculate the rate required AFTER priming
   e.g. $\frac{10.8}{12}$ *= 0.9 ml/hr*

$$rate = \frac{volume\ in\ syringe}{time\ in\ hours}$$

5. Draw up the required dose of Apomorphine from the pre-filled syringe.

   - Take the Apo-Go connector that is provided with the pre-filled syringe and detach one of the caps.
   - Screw open end onto the luer lock syringe
   - Detach the second connector cap, remove grey rubber cap from the pre-filled syringe and attached to the connector
   - Holding the syringe vertically, push down on the plunger of the pre-filled syringe to transfer the required volume of Apomorphine

6. Prepare a label and attach to syringe

7. Examine T34/Bodyguard T to ensure it is serviceable

8. Insert battery – switch on T34/Bodyguard T and wait for self-check to complete:
   - Display lights up
   - Alarm sounds
   - Drive mechanism moves to last position
   - Configured data is displayed

9. Connect the Saf T Intima subcut port to the syringe and prime the line

10. Position the drive mechanism on the T34/Bodyguard T to fit syringe length using the ◄◄ and the ►► keys

11. Fit the syringe and confirm the type and size

12. Insert the Saf T Intima device subcutaneously and secure with a transparent dressing

13. Confirm the volume measured by the T34/Bodyguard T (this should be the volume to be infused)

14. Confirm the duration shown on device (defaults to 24:00 hour). Can be adjusted using the ▲ and ▼ keys

15. Confirm the rate shown on the screen

16. The display will show the current infusion data:
    - Volume xx.xml
    - Duration xx:xx
    - Rate x.xxml/hr

    If correct confirm the settings

17. Start the infusion & lock the keypad

18. Place the syringe driver <u>correctly</u> into its box and lock

19. Place the syringe driver out of direct sunlight at approximately the same height as the infusion site.

20. Document date, time and volume left in syringe.

21. Check syringe driver after 10 minutes to:
    - ensure that the volume is decreasing appropriately
    - the site is not inflamed
    - that the battery capacity is greater than 30%

22. During the infusion the syringe driver must be checked after 1 hour, then 2 hourly throughout the duration of the infusion

SETTING UP A FRESENIUS KABI AGILIA SYRINGE PUMP FOR APOMORPHINE

1. Apomorphine is available from pharmacy in pre-filled 10ml syringes (5mg/ml)

2. Obtain Fresenius Kabi syringe pump from Medical Equipment Loan Service (disposables needed 30ml syringe, label, giving set, 9volt battery, Saf T Intima subcut port, clear adhesive dressing)

3. Calculate the correct volume of Apomorphine for patients prescription (usual dosage is 4 – 7 mg/hr)
   e.g. 4.5 mg/hr over 12 hours (4.5 x 12) = 54mg = 10.8mls

4. Calculate the rate required AFTER priming $$rate = \frac{volume\ in\ syringe}{time\ in\ hours}$$

   e.g. $\frac{10.8}{12}$ *= 0.9 ml/hr*

5. Draw up the required dose of Apomorphine from the pre-filled syringe.

   - Take the Apo-Go connector that is provided with the pre-filled syringe and detach one of the caps.
   - Screw open end onto the luer lock syringe
   - Detach the second connector cap, remove grey rubber cap from the pre-filled syringe and attached to the connector
   - Holding the syringe vertically, push down on the plunger of the pre-filled syringe to transfer the required volume of Apomorphine

6. Prepare a label and attach to syringe

7. Connect the Saf T Intima subcut port to the syringe and prime the line - close clamp once primed

8. Examine Fresenius Kabi syringe pump to ensure it is serviceable

9. Switch the pump on and wait for self-check to complete:
   - Display lights up
   - Alarm sounds
   - Software screen is displayed

10. Withdraw drive mechanism and open barrel clamp

11. Fit the syringe and confirm the type and size

12. Confirm Drug A-C and Basic Infusion

13. Reminder to purge device (Mandatory Set Prime) – confirm you are not connected to the patient

14. Unclamp line and follow instructions to purge (press and hold bolus button). Stop purge until you see a small bubble of fluid at the end of the giving set. BE AWARE as the medication stains green.

15. Set the rate using the chevron buttons

16. Insert the Saf T Intima device subcutaneously and secure with a transparent dressing

17. Attach the giving set to the Saf T Intima

18. Start the infusion & lock the keypad

19. Document date, time and volume left in syringe.

    - Check syringe pump after 10 minutes to:
    - ensure that the volume is decreasing appropriately
    - the site is not inflamed

20. During the infusion the syringe driver must be checked after 1 hour, then 2 hourly throughout the duration of the infusion