Competency Checklist

Introduction

The purpose of this checklist is to assess the knowledge of the participant in the procedure of setting up of an MS26 pump and the indications for use.

SECTION ONE: All about the driver

1. Over how many hours is the syringe driver designed to run medication?

2. Identify the components on the MS26 syringe driver that secures the syringe and explain their function.

3. What are the measurements on the barrel of the driver for?

4. On what two occasions does the alarm bell sound?

5. Explain the function of the boost button facility.

6. What size syringes can be used on the driver?

SECTION TWO: Indications for use and drugs suitable

1. For what reasons would a syringe driver be set up?

2. What drugs can be used in the driver?

3. What drugs are not suitable to be given subcutaneously by this method?

4. How many drugs can be combined in one syringe?

5. Which drugs are compatible together in one syringe?

6. What should you be aware of when mixing Cyclizine with other drugs in a syringe driver?

7. When should a syringe driver be used with caution?

8. If a patient is vomiting and has a Fentanyl patch is it necessary to put Diamorphine into the syringe with anti-emetic?

9. With which drug may saline be needed as the mixing agent and for what reason?

10. Why is it important to prime the line?

SECTION THREE: Setting up the driver

1. What information should be given to a patient before the driver commences?

2. What equipment is needed for setting up the syringe driver?

3. Demonstrate how all the pieces are connected and how to prime the line.

4. Before attaching the syringe to the driver, what must you do first?

5. If the volume in a syringe measures 40mm along the barrel of the driver, what should the rate then be set at?

6. How long should the infusion last?

7. How do you start the infusion?

8. What does the indicator light show?

9. Where should you record the progress of the infusion?

SECTION FOUR: Troubleshooting

1. A patient has a syringe driver with Diamorphine. Over the last 12 hours he/she has required extra analgesia. What should you consider when assessing this? Give four examples of what you would look at on the driver to ensure it is not malfunctioning and causing the need for the increase in medication.

2. The indicator light is not flashing. What do you look for?

3. The infusion is too slow. What do you look for?

4. The infusion is too fast. What do you consider?

5. A doctor has prescribed diazepam via a driver. What would you do? Explain why?

6. A syringe driver containing Cyclizine is running slowly. Unfortunately, this has lasted longer than 24 hours. Explain what your course of action would be.

7. The medication contained in a syringe driver has precipitated. What steps would you take to prevent this from happening on subsequent occasions?

Competency Checklist – Answer Sheet

SECTION ONE: All about the driver

1. MS26 - Green in colour used for 24 hour infusions has a boost button. mm = rate.

2. Plunger = grips the syringe and pushes forward black fastener = secures to syringe driver.

3. To determine the rate if the syringe measures 48 the rate is 48.

4. When the button is pressed to start the driver.
   When the infusion is complete.

5. To start the driver (the efficacy of pressing the boost button to give a bolus dose of medication is negligible and should not be advocated).

6. 10ml, 20ml and 30ml (30ml under guidance).

SECTION TWO: Indications for use/Drugs Suitable

1. When oral route not suitable i.e. nausea/vomiting, dysphagia, severe weakness or coma.

2.
   - Diamorphine
   - Midazolam
   - Haloperidol
   - Metoclopromide
   - Levopramazine
   - Hyoscine hydrobromide
   - Hyoscine butylbromide
   - Cyclizine
   - Ketamine (under supervision of Palliative Care Team)
   - Hydromorphone (available from Pharmacy on 24 hours notice).

3. Diazepam is not suitable via the driver.

4. No more than two (although some literature supports the use of anywhere up to five → but precipitation can occur)

5.
   - Diamorphine/Cyclizine
   - Diamorphine/Haloperidol
   - Diamorphine/Metoclopromide
   - Cyclizine/Haloperidol
   - Diamorphine/Levopromazine
   - Hyoscine hydrobromide/Diamorphine
   - Hyoscine butylbromide/Diamorphine
   - Hyoscine hydrobromide/Cyclizine
   - (combination can be endless)

6. Use extra water to mix – precipitation.

7. Thrombocytopenia (used under guidance).

8. NO the Fentanyl will still be absorbed.

9. Methotrimeprazine – may cause some skin irritation although lessened.

10. To prevent air getting into the line.
    So that the drug is given to time (it takes 4 hours for an infusion to get to a theraputic level = not primed takes longer).

SECTION THREE: Setting up the Driver

1. Why the driver is to be commenced?
- What will go into it?
- Choice of where to be sited?
- How long is it to remain?
- When will the syringe be changed?
- Graseby patient information booklet.
- Consent to commence the driver.

2. 10/20ml syringe
- the MS26 driver
- the drugs
- the prescription chart
- the battery
- tape to secure
- opsite dressing
- the cannula
- the long line
- the pump chart (to check at subsequent medicine rounds).

3. Practical demonstration.

4. Measure the syringe against the barrel of the driver.

5. 40mm

6. 24 hours.

7. Press the start/boost button.

8. That the infusion has started and is still in progress.

9. The yellow syringe pump infusion chart at the end of the bed.

SECTION FOUR: Troubleshooting

1. If there are no underlying causes i.e. new pattern
   a) check indicator light is still flashing
   b) check when infusion should end = has it run through behind time? Press start button to see if it is working/has someone forgotten to press at the beginning of the infusion?
   c) Has the syringe been secured properly?
   d) Is the line kinked or cannula blocked = flush line?
   e) Is the insertion site red or swollen?
   f) Has the rate been set correctly?
   g) Is the battery working?
   h) Is the machine wet i.e. when showering?
   i) Has the driver been dropped?
2. If a new infusion = check that the start button has been pressed.
   If not, and halfway through an infusion = check battery and change.
   If still not flashing = change for new driver and consider a whole new infusion or give bolus subcutaneous dose to boost symptom control.

3. Is the rate set correctly and all of the above?

4. Is the rate set correctly ??? has the line been tampered with?

5. Do not give it and clarify that this is what the doctor really meant to prescribe, not compatible with subcutaneous route. Whilst many drugs in Palliative Care are not licensed to give by this route, they are perfectly safe.

6. The whole line should be discarded and a new one commenced = precipitation may have occurred and rendered the line useless. ALSO anti-emetics should not be used if they have been in the syringe driver 24 hours or more as their effectiveness will have diminished.

7. Add more water to the solution or put into a separate driver if combined with another drug.