

### **AIM**

The purpose of this booklet is to serve as a reminder to staff of what medications in injectable form are suitable for use in a syringe driver, via the subcutaneous route.

It is not meant to be a replacement for education and practical supervision for any new or newly qualified member of staff. It is the responsibility of the ward manager and the new member of staff to ensure they are adequately educated on the use of the syringe drivers. If in any doubt always consult the policy/procedure file or the Palliative Care Team/Pharmacy. \*Many drugs are not licensed for subcutaneous administration however those listed have been recognised as compatible for this route

### **Section One: Indications for use**

Inability to swallow due to:

- i. Obstruction – oral, oesophageal, intestinal.
- ii. Persistent vomiting.
- iii. Throat lesions.
- iv. Terminal stages of illness, i.e. weakness, coma.
- v. Malabsorption and therefore, unsatisfactory response to other routes of administration of medication.

### **Section Two: Aims of use**

- i. To provide continuous, effective symptom control (i.e. nausea/vomiting, pain, agitation, colic, etc), without fluctuation in blood plasma level, even in the terminal phase.
- ii. Relieves the patient of multiple oral medication.
- iii. Allows quick administration of medication when oral is felt not to be appropriate.
- iv. Saves valuable nursing time in 4 hourly injections (but must not replace effective assessment of symptom control and administering extra medication when necessary).
- v. Enables the patient to remain mobile and, therefore, maintaining independence.

### **Section Three: Drugs Used in a Syringe Driver**

- i. Only those in an injectable form.
- ii. \* Must be suitable for subcutaneous injection.
- iii. Must be stable in the solution for a minimum of 24 hours before the duration of the run.
- iv. Medications must be physically compatible.

v. Most solvents mixed with water.

vi. Levomepromazine usually mixed with saline to prevent skin irritation.

### **SPECIAL NOTES**

1. Diamorphine is usually the opiate of choice as it is highly soluble, i.e. 1g Diamorphine dissolves in 1.6ml water. But there may be occasions where Oxycodone is prescribed in particular if opiate sensitive (myoclonic jerking, excessive drowsiness, hallucinations).
2. We recommend no more than 2 drugs per syringe unless under the guidance of the Palliative Care Team.

### **Drugs compatible for subcutaneous route**

Anti-emetics:	Haloperidol Metoclopramide Cyclizine Levomepromazine
Analgesics:	Diamorphine Ketamine (check with Palliative Care Team before using)
Anti-spasmodics:	Buscopan (Hyoscine butylbromide) Midazolam
Anti-secretory:	Hyoscine hydrobromide
Sedatives and anxiolytics:	Levomepromazine Midazolam Haloperidol

### **Drugs not to use via the subcutaneous route**

<b><u>Drug</u></b>	<b><u>Reason</u></b>
Diazepam	Precipitation/Pain
Chlorpromazine	Precipitation
Prochlorperazine	Skin sensitive
Diclofenac	Light sensitive/skin sensitive