

Health Guidance

**McKinley T34 Ambulatory syringe pump
Used in the provision of adult palliative and end of life
care**

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The contents should not be regarded as a statement of The Care Inspectorate policy, nor relied upon as a comprehensive statement of best practice, but as common sense guidance on issues of topical interest based upon authoritative statements of best practice in the field, at the time of preparation, and which may be of assistance to Care Inspectorate staff when reviewing practices and policies.

This guidance may be of interest to others who have an interest in the use of McKinley T34 ambulatory syringe pump.

Care Inspectorate staff may come across this medical device, that is, the McKinley T34 ambulatory syringe pump, in care homes, care at home services and hospitals due to the size and portable nature of this device.

Aim of Health Guidance

To ensure people in the services we regulate are cared for in a safe environment by staff who know how to use medical equipment safely.

This guidance provides information on systems that must be in place in registered care services to ensure that the McKinley T34 ambulatory syringe pump is used safely. Staff in services must be sure that they can demonstrate competent person-centred, safe and effective healthcare.

To support best practice in the hospital, hospice and community setting throughout Scotland there is a national policy and guidelines on this device. These can be found at NHS Education for Scotland (NES) at the Pharmacy section for further reference (March 2011)¹

http://www.nes.scot.nhs.uk/media/347814/mckinley_20t34_20syringe_20pump_20guidelines_20final.pdf

What is Palliative Care?

Palliative care is a proactive approach involving a multi-professional team. As well as controlling pain and other distressing symptoms, it applies a holistic approach to meeting the physical, practical, functional, social, emotional and spiritual needs of patients and carers facing progressive illness and bereavement.

Although historically associated with the later stages of cancer, it is now established that palliative care should also be a routine part of care for those living with and dying from a wide variety of non-malignant conditions, such as dementia, heart failure, Huntington's disease, motor neurone disease, multiple sclerosis, muscular dystrophy, Parkinson's disease, renal failure and respiratory failure among others.

Palliative care can be provided at any stage following diagnosis of a life-limiting illness or condition, and not solely in the last few days, weeks or months of life. A palliative care approach should be used as appropriate alongside active disease management from an early stage in the disease process (Scottish Partnership for Palliative Care, 2014)².

Introduction

An important element of palliative care is concerned with controlling pain and other symptoms for an individual person. When a person is unable to swallow oral medicines to relieve symptoms, for example, pain relieving medicine (analgesia) or anti sickness medicine (anti emetic) other alternative ways of administering medicine may have to be considered.

One method is by administering medicine by a continuous subcutaneous infusion (CSCI) via a syringe pump which avoids the need for repeated injections which can be painful and unacceptable.

The medical infusion device that this guidance refers to is the McKinley T34 syringe pump which was launched in the United Kingdom in 2005.

What is the McKinley T34 Syringe Pump?

The McKinley T34 syringe pump is a small, lightweight, battery powered, ambulatory syringe pump which has a Liquid Crystal Display (LCD) screen.

The pump can detect the size of the syringe, and calculates the appropriate rate. It also has a rapid occlusion alarm and a message appears on the display screen indicating the cause of the alarm.

Summary of what can be displayed:

- deliverable volume
- rate in milliliters per/hour (ml/hr)
- duration of infusion
- syringe size
- cause of the alarm and alerts
- error messages
- context-sensitive instructions

The standard delivery period for a continuous subcutaneous infusion in palliative care is 24 hours.

Advantages

- Acceptability and reliability
- Reduced need for injections
- Maintenance of a person's mobility
- Constant therapeutic drug levels over a 24 hour period
- Only requires being re-filled every 24 hours

Disadvantages

- Potential source of infection
- Skin site reactions
- In emaciated people or those on long term infusions, skin site availability may become an issue
- Need for daily visit in the community

Health Guidance

Policy and procedure:

To inform and guide staff the service must have a policy and procedures on the use of the McKinley T34 syringe pump.

Manufacturer's guidance:

The service should have the manufacturer's instruction manual on the use of the McKinley T34 syringe pump available for staff, service users and their relatives.

Education and training:

Before use staff must have received education and training on the setting up and management of these devices. Healthcare professionals have a personal responsibility and accountability to ensure they receive education and training in the safe use and observation of any medical device they need to use. Both theory and practical experience should be included in the training programme.

The provider and manager of care services should ensure that education and training takes place and maintain a record of staff who are trained and competent to use such devices (Medicines and Healthcare products Regulatory Agency (MHRA) infusion systems v2.1 2013).³

Registered nurses must be registered with the Nursing & Midwifery Council (NMC). At supervised practice a nurse can discuss continuing education, training and supervised practice to keep up to date.

Recording and documentation:

The service should have the following appropriate documentation to monitor the McKinley T34 Syringe Pump:

- a record of the type of device being used
- infusion sites, care of and site changes
- prescription chart for medicines
- records for recording and checking medicines for use in syringe pumps⁴.
- monitoring chart (to record checks whilst syringe pump in use)
- assessment tool for pain and / or symptom control

Registered nurses must comply with the most recent guidance published by the Nursing and Midwifery Council (MWC) about records and record keeping⁵.

Access to specialist advice:

Often medical devices such as syringe pumps are not used on a regular basis in services such as care homes. It is very important that care services have access to specialist advice and support when required. From, for example, members of the primary healthcare team, such as, district nurses, general practitioners, or from staff based in hospices or specialist palliative care units in general hospitals.

Services should have access to advice on medicines used in the McKinley T34 syringe pump, for example, on drug choice and dose. Sources of advice may be from the service users GP, specialist palliative care pharmacists, hospital palliative

care pharmacists or local hospice staff. Advice may also be found in the services local NHS palliative care guidelines.

The service should be aware that staff / practitioners should be seeking advice for drugs and combinations with which they are not familiar.⁶

Guidelines about syringe pump:

The services should have access to their local NHS guidelines on the McKinley T34 Syringe Pump.

Informed consent:

The individual / service user should give informed consent. Where this is not possible the Adults with Incapacity Act (Scotland), should be referred to⁷.

Service user information:

Service user information should be available, for example, if the service user goes home with the device at a weekend, or on pass, they should be given verbal and written information on the use of the syringe pump device and who to contact in an out of hours and emergency situation.

Safety and risk assessment:

The service should assess if they require using accessories that protect the syringe pump from accidental knocks and tampering, such as, the optional lockbox or carry pouch.

Safe storage:

The service should have proper safe storage facilities for this device.

Syringe pump maintenance:

If the service provider owns the device, systems must be in place to have the T34 syringe pump serviced regularly, at least annually whether used or not. The service should be made at a medical physics department by authorised personnel.

Syringe pumps should be sent for maintenance checks immediately if they have been dropped, suffered fluid ingress, for example, fluid split over the device or device accidentally dropped in a bath or if there is any doubt as to their functional operation whilst in use.

Cleaning and decontamination:

Cleaning should be carried out as recommended by the manufacturer. Access to infection prevention and control personnel should be available if required.

Adverse Incidents and Hazard Warning Notifications:

- The service should be aware of how to report adverse events or incidents to the Regulating Medicines and Medical Devices (MHRA) if there is an incident involving a device.

- The service should receive or have access to safety warning notices and medical device alerts. It is important that relevant notices are acted and reported upon.

Out of hours arrangements:

Out of hour's arrangements for staff should be in place, for example, if the device was to stop in an out of hour's situation contact details of who to contact should be available to support staff.

References

1. NHS Education for Scotland Guidelines for the McKinley T34 at Pharmacy (2011)
www.nes.scot.nhs.uk/disciplines/pharmacy
2. Scottish Partnership for Palliative Care (2014) online definition What is palliative care?
3. Medicines and Healthcare products Regulatory Agency (MHRA) Infusion systems v2.1 (December 2013)
4. MHRA devices in practice – a guide for professionals in health and social care 2008 (online 2011) web version
5. Nursing & Midwifery Council (NMC) Record keeping Guidance for nurses and midwives (2010)
6. Scottish Executive National care standards care homes for older people Standard 15 Keeping well medication (2005)
7. Adults With Incapacity Act (Scotland) Act 2000

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অনুরূপে ঐসাপক্ষে এই প্রকাশনাটি অন্য ফরম্যাট এবং অন্যান্য ভাষায় পাওয়া যায়:

Tha am foillseachadh seo ri fhaighinn ann an cruthannan is cànan eile ma nithear iarrtas.

অনুরোধসাপেক্ষে এই প্রকাশনাটি অন্য ফরম্যাট এবং অন্যান্য ভাষায় পাওয়া যায়।

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