

Continuous subcutaneous infusion syringe pump (CSCI)

Information for patients, relatives and carers

This leaflet will answer some common questions about having a continuous subcutaneous infusion (CSCI) syringe pump (also known as syringe driver).

What is a CSCI syringe pump?

It is a small battery-powered pump with a syringe. The pump delivers medicines in the syringe continuously at a regular rate over 24 hours. Subcutaneous means under the skin. An infusion is a way to give medication through a line or tube.

This type of syringe pump is small enough to be carried around in a bag or tucked under a pillow. To keep it safe, the pump is placed into a clear plastic “lock box”.

Why use this type of syringe pump?

The main reason for using a CSCI syringe pump is to help manage your symptoms. This is usually when you are not able to take medicine by mouth (oral) or you need lots of injections. For example, if you are feeling or being sick, or if you are not able to swallow. Sometimes your body is not able to absorb oral medication.

Your symptoms might include pain, sickness, anxiety or agitation, fitting (seizures), shortness of breath (breathlessness) or noisy breathing caused by a build-up of mucus in the throat and airways. If you have more than one symptom, the syringe may contain more than one medicine.

Syringe pumps can help manage symptoms at any stage of treatment. It is important to know that they are not just used towards the end of life.

The nurses and doctors will explain why they have recommended a syringe pump for you and how it works. They will answer your questions and talk to you about any concerns you have.

How does the syringe pump work?

The nurse will place a very small plastic tube just under the skin in your arm, leg, tummy or back. This can stay in place for a few days. The small tube connects to a long line which is attached to the syringe in the pump. A green light will flash when the pump is giving you the medicines.

You will not feel an immediate effect after the start of the syringe pump. It can take about four hours for the medicine to reach a steady level in your body.

The nurse looking after you will check the pump regularly to make sure that it is working correctly and that you feel comfortable. If needed, your nurse can give you an extra dose of medicine to help manage a symptom (sometimes known as ‘breakthrough’ medication).

The nurse will refill the syringe once every day. Sometimes the doctor will recommend a change in the dose or type of medicine to help manage a symptom. They will make sure you know about any changes in your medication.

What does it mean if the syringe pump alarms?

The alarm will sound if the pump is not working as it should. It will also alarm if the battery is low or the syringe is empty and needs to be refilled. Please call your nurse if the pump alarms. Do not press buttons on the pump yourself.

Common worries about having a syringe pump

Although syringe pumps are used to manage symptoms at any stage of illness, they are often used in the last days and weeks of a person's life (for end of life care). Some people worry that having a syringe pump can make them die sooner. It is important to know that there is no evidence for this.

Some people also worry about the type of medicines used in the syringe pump, for example, strong opioids such as morphine. We prescribe opioids to help manage pain and breathlessness, not to speed up death.

Some people fear that the medication in the syringe pump will make them sleepy (sedate) or less aware. Medicines are carefully prescribed to maintain comfort, preserving awareness where possible. However, people are likely to sleep more as they approach the end of their life.

If you have any worries or concerns, please speak with the nurses and doctors looking after you.

How do I give feedback about my visit?

We want to hear your **suggestions** or **comments**. Your feedback helps us provide the best service. You can always speak to a member of staff.

You can also contact the **patient advice and liaison service (PALS)** on **020 3312 7777** (10.00 to 16.00, Monday to Friday excluding bank holidays) or email at imperial.pals@nhs.net. The PALS team will listen to your concerns, suggestions or questions and they can help solve problems.

You can make a complaint by ringing **020 3312 1337 / 1349** or emailing tr.Complaints@nhs.net. The address is Complaints department, fourth floor, Salton House, St Mary's Hospital, Praed Street, London W2 1NY.

Other ways to read this leaflet

Please email us at imperial.communications@nhs.net if you need this leaflet in a different format. This could be large print, Easy read, as a sound recording, in Braille or in a different language.