

Pain Relief and Symptom Management using a CADD Pump

Patients can experience pain and other symptoms, such as having trouble sleeping, for many reasons. A CADD pump is one way to give you pain medicine continuously even while you are walking around and being active. It is attached to a pole on wheels that can go where you go.

CADD stands for **C**ontinuous **A**mbulatory **D**elivery **D**evice.

You can also give yourself an extra dose if you feel any more pain. This is called **PCA**, which stands for **P**atient-**C**ontrolled **A**nalgesia.

How does the CADD pump work?

The medicine is in a medication bag attached to the CADD pump, which pumps it through a thin tube. It is given through a small needle inserted under the skin in your upper arm, upper leg or abdomen.

How do I know the CADD pump is working?

The pump is giving you medicine when:

1. There is a **green** flashing light on the left-hand side of the screen, and
2. The bar at the top of the screen is **green** and reads 'RUNNING'

It is **NOT** giving you medicine when there is an **orange** flashing light and the bar is **red** and reads 'STOPPED'.

How do I give myself an extra dose if I am feeling pain or other symptoms?

There are two ways to give yourself a PCA dose:

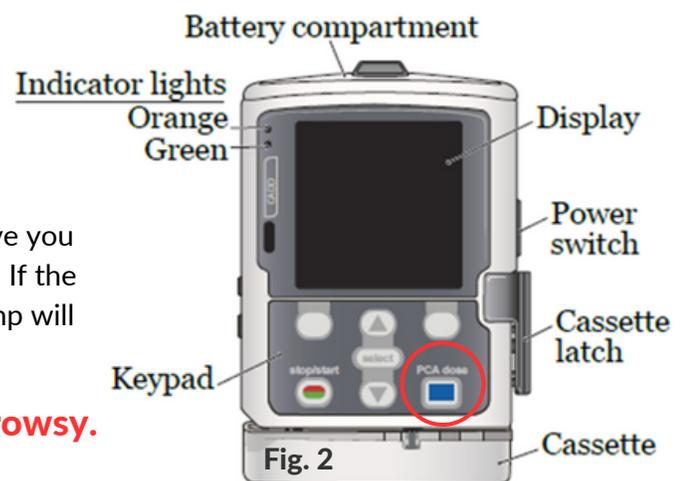
1. Press the blue button on the PCA dose remote (fig. 1), or
2. Press the blue 'PCA dose' button on the CADD pump keypad (fig. 2)

Please note: The blue 'PCA dose' button will not work if the PCA dose remote is plugged in.

If an extra dose is okay to be given to you, the green light on the remote will be flashing. The light is solid green while the dose is being delivered. The medicine will take 5 to 10 minutes to work. If the light is off, a PCA dose is not available.

You can NOT get too much medicine because the pump will NOT give you more than it is set to deliver to prevent you from having an overdose. If the blue button is pressed again during this time, the message on the pump will read 'PCA dose not available. Currently locked out.'

Do NOT use the PCA when you are comfortable or drowsy.



Close family members and friends: If you find your family member or friend is experiencing pain or other symptoms, **let their nurse know** so they can be properly assessed and treated.

Do NOT shower with the CADD pump.

The pump is NOT waterproof so it can get damaged if it gets wet. Wipe off any water that gets on the pump with a dry cloth or tissue. Let your nurse know if the pump gets very wet or if you want to shower.

There are 2 types of medicine that you can get:

Opioid: Used for pain relief

Examples: hydromorphone, morphine, oxycodone, codeine

Benzodiazepine: Used to manage anxiety or if you are having trouble sleeping

Examples: midazolam, lorazepam, diazepam

Common side effects of opioid pain medicine:

Drowsiness - You may feel drowsy as your body gets used to the medicine. If you feel too drowsy to do your daily activities, let your nurse know to change your pump settings. Drowsiness is also the most common side effect of benzodiazepines.

Constipation - It is important to regularly take laxatives, such as Senokot, to prevent getting constipated.

If you have not had a bowel movement in the past 5 days, let your nurse know to do a proper health assessment.

Dry mouth - Continue to drink fluids to manage your dry mouth. You can also try sucking on ice cubes, chewing sugar-free gum, or rinsing your mouth with artificial saliva such as Biotene Mouth Wash.

Nausea - You may experience nausea for a short time after the pump is first started, a PCA dose is given, or the pump settings are changed. If you experience nausea, let your nurse know to give you medicine to help manage it.

Other side effects:

Confusion - Some patients may become confused or start imagining things that are not really happening. They may also become restless and call out.

Muscle Twitches - Some patients may develop muscle twitches. It is an involuntary, irregular, repetitive movement. These symptoms can be distressing to patients and their families. These may be because of the patient's other health conditions or it may be because of the pain medicine that they are using. It may not mean that the patient is experiencing pain. Let your nurse know to do a proper health assessment.

Can I get addicted to the medicine?

Addiction is possible when using opioid or benzodiazepine medicine, BUT addiction is less likely to happen if the medicine is properly used only when you need it. This is why it is important that you should only press the PCA button when you are feeling any more pain or other symptoms.

Something is wrong with the CADD pump when:

There is a beeping sound and the screen is red

This is a high-priority alarm that requires immediate attention. This alarm stops the pump from giving you medicine. It can be because there is a blockage in the tube or the medicine is not flowing through the pump. Let your nurse know to further assess.

There is a beeping sound and the screen is orange

This is a medium-priority alarm that is telling us to recheck the pump settings or to closely monitor a condition. This alarm does not stop the pump from giving you medicine. It can be because the medicine cassette has not been inserted properly or the pump has no battery charge left. Let your nurse know to further assess.

The screen is blue

This is a low-priority alarm. It can be because the pump has low battery or to inform us that the pump settings have been changed. This alarm goes away after 5 seconds.