

# BodyGuard 545™

## PCA PUMP

for Intrathecal Pain Therapy

### Patient Information Folder



# ***TABLE OF CONTENTS***

<b>What is Intrathecal Pain Therapy .....</b>	<b>3</b>
<b>Medication Delivery .....</b>	<b>3</b>
<b>Discharge Checklist .....</b>	<b>4</b>
<b>Community Palliative Care Information .....</b>	<b>4</b>
<b>Hospital Appointments.....</b>	<b>4</b>
<b>More About Your Pump.....</b>	<b>5</b>
<b>Giving Yourself a Bolus .. ..</b>	<b>6</b>
<b>Alarms .....</b>	<b>6</b>
<b>When to Seek Help ... ..</b>	<b>7</b>
<b>Carrying Your Pump .. ..</b>	<b>8</b>
<b>General Care Instructions .....</b>	<b>9</b>
<b>Equipment Return.....</b>	<b>9</b>
<b>Daily Recording Sheets.....</b>	<b>10—11</b>

## WHAT IS INTRATHECAL PAIN THERAPY?

Intrathecal pain therapy involves the delivery of small, controlled amounts of pain medication directly into the cerebrospinal fluid that surrounds the spinal cord. This therapy was developed to reduce pain and to avoid the side effects that often accompany high doses of oral pain relievers.

Intrathecal pain therapy delivers pain medication directly onto the pain receptors in the spinal cord and therefore requires significantly lower doses of medication to gain relief.

In order to deliver your medications to control your pain, your specialist has recommended an ambulatory infusion pump.

Your Community Palliative Care Nurse is familiar with how this pump works but it is also useful for **you** to understand how it functions.

- If you drop your pump it may be damaged and you may need to replace it. Call your Palliative Care Nurse immediately.
- You will NOT be able to bath while you have an intrathecal catheter but you can shower. When showering, seal the pump in a plastic bag to make sure it **does not** get wet.
- If the pump alarms, listen carefully to the alarm signal and check the pump display before you silence it so you can determine the problem.
- Your Palliative Care Nurse will change your dressing every seven (7) days.
- You will charge the pump overnight in the charger provided.

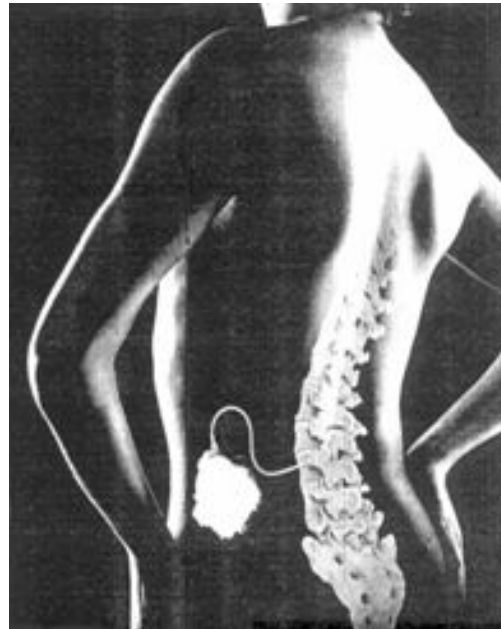
## MEDICATION DELIVERY

The **BodyGuard 545™ PCA Pump** has been provided to deliver pain medications directly into the spinal fluid. PCA stands for “Patient Controlled Analgesia (pain relief)”. This pump has simple controls that are easily operated. The PCA pump can be programmed to provide three delivery profiles – basal infusion only, basal infusion with PCA bolus or PCA bolus only.

**Basal Infusion:** Continuous infusion of medications.

**PCA Bolus:** A dose of medication for break-through pain, self administered by you.

Your pump has both these functions  
The PCA bolus function allows you to give yourself an extra dose of pain relief at intervals if needed



## ***DISCHARGE CHECKLIST***

☐ Post GP copies of “Intraspinal Analgesia – A Guide for Health Professionals” and this Palliative Care Service “BodyGuard545™ PCA Pump Patient Information Booklet” as soon as possible prior to discharge

☐ Pharmacist notified of discharge

☐ Palliative Care Referral    Contact 1-2 days prior to discharge

☐ Prescription                                      ☐ Intrathecal Prescription Chart

☐ Medication Card                                      ☐ Discharge Letter

☐ Consumables – provide 1 week’s supply from Ward

☐ Date for next dressing    /    /    (do prior to discharge)

***COMMUNITY PALLIATIVE CARE  
NURSING SERVICE REQUIRED***

☐ YES                      ☐ NO

Nurse’s Name:

1st Visit:

Usual times of visits:

Phone No: (03) 375 4274                      (Palliative Care Nurses)

***HOSPITAL APPOINTMENTS: Oncology Outpatients Phone No -***

With:	Day	Date	Time

***Please bring this folder with you when coming  
into the hospital at any time.***

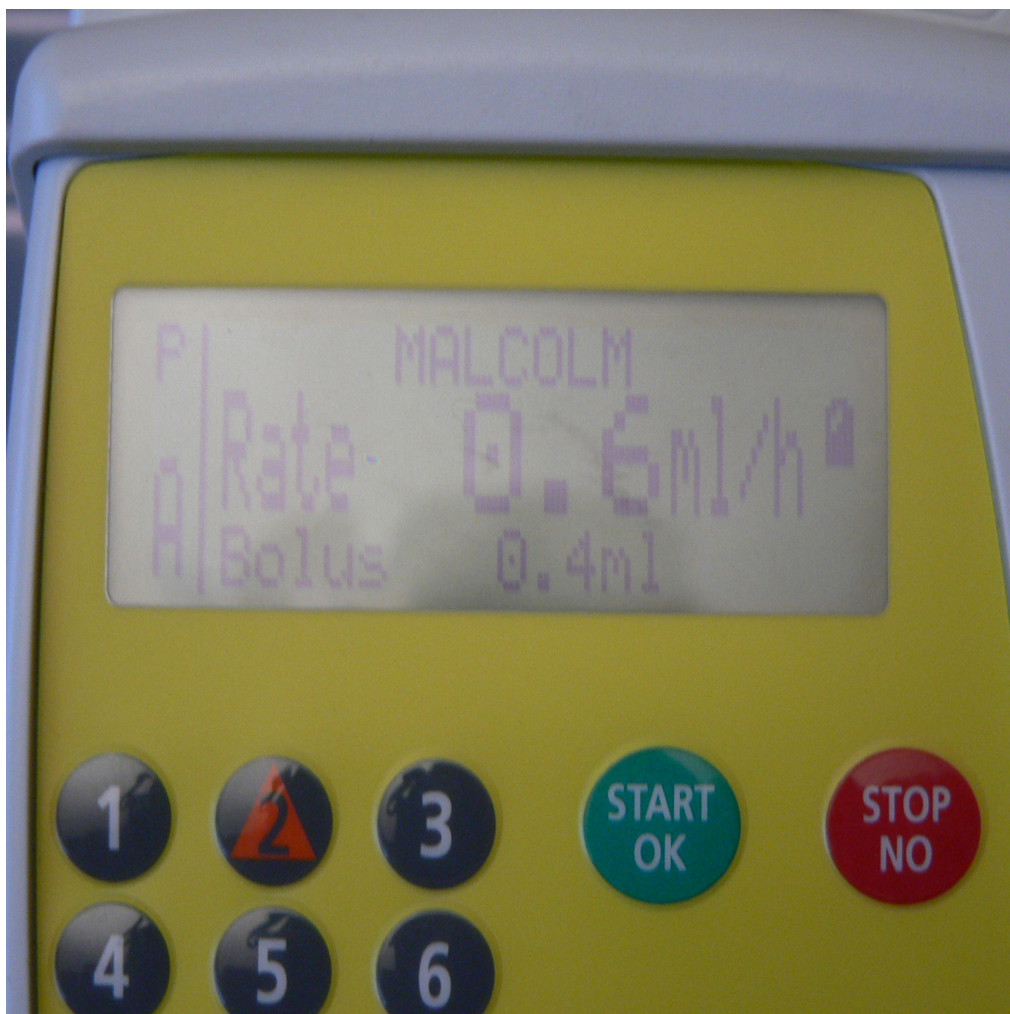
## ***MORE ABOUT YOUR PUMP***

The medication solution runs from the container (usually a clear bag which is made up in the Wellington Hospital Pharmacy) through the tubing inserted in to the base of the pump. The pump has a sensor that pumps the solution at an accurate and controlled rate.

The Pump will be programmed by your Hospital Nurse or Community Nurse and the history will be checked daily either by you or your nurse. You should not attempt to reprogram the pump unless under the direction of a physician or nurse.

The pump has a digital screen with your regime showing at all times, This will show the continuous basal rate and the bolus rate you can receive if you require extra medication. To bolus you can either use the bolus button or the attached bolus delivery cord. A **bolus lockout time** will be set which means that a time period between one bolus and the next will be programmed to ensure that you do not get more than the recommended medication dose. You will be shown how to read the history of the boluses you have used.

The pump program and any alerts will be shown on the **pump display**.





## GIVING YOURSELF A BOLUS

You will be able to have breakthrough doses of medication if needed by using the PCA function on your pump.

The PCA bolus button is located on the pump as indicated by the arrow or you can attach the bolus cable. PCA bolus is activated when you press the '**bolus**' button or by depressing the button at the end of the bolus cable.

The pump will beep once (if bolus is permitted) and a bar chart will appear in the display confirming the bolus. If the lock out time since your last bolus has not elapsed, you can check the time until the next bolus will be available by using the '**info**' key.

**Your bolus delivery lockout is 15 minutes.  
The amount is set only by the physician who is prescribing your medication.**



## ALARM CONDITIONS

If the infusion pump detects a problem, four things happen:-

1. The infusion stops
2. An alarm is activated.
3. An alarm message appears on the display screen
4. The green light on the front of the pump changes to red.

Pressing the  during an alarm will mute the alarm for two minutes.

See troubleshooting page or seek help as below.

**Battery Alarms:** There are two battery alarms.

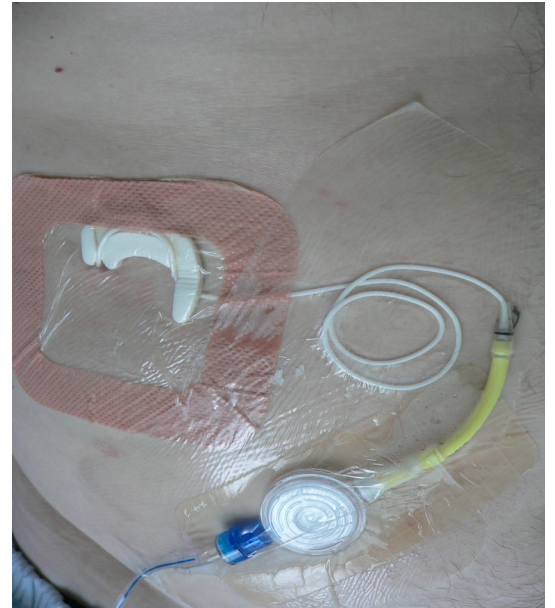
1. LOW BATTERY—this indicates there is 30 minutes of battery life remaining. The LED light will blink red.
2. END BATTERY— the pump will cease operating. The battery must be put in the charger attached to the mains to restart the pump. The LED light will change to red.

# WHAT TO CHECK & WHEN TO SEEK HELP

## INFECTION

The greatest risk to you is infection so it is really important that you:

- check the area twice a day looking for redness , soreness or swelling where the catheter comes out from your abdomen - if you notice this phone your nurse to have it checked
- keep the area where your catheter comes out clean, dry and check that the dressings remain sealed at all times
- do not stand under the shower for long periods with water running over the dressings as this may cause them to lift
- if the plastic dressing starts to lift you will have extra plastic dressings to reseal it with - DO NOT remove the old dressing
- if the epifix dressing (the flesh coloured dressing keeping the catheter attached to your skin) becomes unsealed ring your nurse immediately to redress the site



### *If you have any problems with:*

- increased pain
- leg weakness / numbness
- difficulty passing urine
- constipation
- feeling unwell
- high temperature
- leakage around catheter site
- moist, loose, leaking dressing
- any redness, swelling or pain at catheter site
- if you have any pump problems

**Seek help immediately from:  
Palliative Care Nurse  
(03)375 4374**

## *CARRYING YOUR PUMP*

Your pump will fit in to a double pocket bum bag and is the safest way to carry it .



- ⇒ Take care that there are no kinks in the tubing and that the medication bag does not get caught in the zip.
- ⇒ The pump goes in the back pocket pushed to the top end (as illustrated) in order to allow the extra tubing to be carefully coiled to fit at the bottom of the pump .
- ⇒ The medication fluid bag is placed in the front pocket as illustrated.
- ⇒ There will be a loop of tubing between the pockets so the zips will remain open just enough to allow the tubes to fit through from one pocket to the other.
- ⇒ Ensure the bum bag is securely fastened around your waist.



## ***GENERAL CARE INSTRUCTIONS***

The BodyGuard 545™ pump must be used strictly in accordance with the instructions.

You should take care to protect the pump at all times. The pump should not be dropped, stored in freezing 0°C temperatures, left in direct sunlight or exposed to excessive heat 40°C.

Extra supplies for the pump should be stored in a dry, cool place until used.

**NEVER** change the programme without the instructions of your health care professional. Doing so may lead to serious injury or death.

The pump can be cleaned by wiping its surface with a slightly damp lint-free cloth and a 1:10 solution of bleach.

**DO NOT** immerse your pump in water - for showering seal the pump in a plastic bag and keep away from the direct flow of water as much as possible.

You will **NOT** be able to bath, swim, sit in a sauna or spa pool while you have intrathecal medication and pump in place.

Ensure you have recharge your pump daily to ensure you do not run out of battery power when out.

Pump performance may be degraded by electromagnetic interference(EMI), such as interference from other electrosurgical units such as cellphones. Operation of the pump under such conditions should be avoided.

### ***Warning:***

*Pump failure may be caused by application of cleaning solutions containing alcohol or solvents. Do not immerse the pump in any fluids.*

## ***EQUIPMENT RETURN***

The pump is on loan from the Palliative Care Service, Christchurch Hospital. When you are finished with the pump, please ensure that your Community Palliative Care Nurse returns it. The **used** dressings, filters and cassette can all be discarded.

## **TAKING 24 HOUR HISTORY** **0800 each day**

1. Press **STOP** on pump and hold until '**Press NO**' for menu appears **DO NOT** press GREY ON/OFF button
2. Press: **RED NO/STOP**
3. Enter Code: 700
4. Press: **GREEN OK/START** button
5. Scroll down screen using **RED ARROW** button on last line of number pad until you see 'Patient History' bolded
6. Press: **GREEN OK/START** button
7. A screen will give you the history you need to record – scroll down on the information to get all details needed for completing the 24 hour checklist
  - Given:** is the volume recording
  - Bol. Given:** is the boluses
  - Bol.Attempted:** is the attemptsRecord on chart on following page
8. Press: **GREEN OK/START** button
9. Press: **RED NO/STOP**
10. Press: **GREEN OK/START** button
11. Press: **GREEN OK/START** button again
12. Press: **GREEN OK/START** button again

**Infusion is now running again.**

## DAILY PUMP RECORDINGS OF 24 HOUR HISTORY

Date	Time	Volume	Boluses	Attempts



**Edited by:**

**Anne Morgan**

**Palliative Care Nurse Consultant**

**Date of Issue: February 2008**

**Phone: 03 364 1473**

**Fax: 03 364 0759**

**Authorised By:     Dr Kate Grundy  
Clinical Director,  
Palliative Care Service  
Oncology Services  
Christchurch Hospital**