

Acute Pain Service
Anaesthetic Department, Level 1, Freeman Hospital

**Guidelines for assessing the Sensory Level in Patients with
an Epidural infusion/PCA**

EFFECTIVE FROM: October 2006

REVIEW DATE: October 2009

In order to assess the extent of an epidural blockade, careful and frequent monitoring is required.

Spinal nerves that cross the epidural space supply specific areas of skin known as dermatomes. Blocked dermatomes are sensitive to changes in temperature; applying ice to the skin will aid you in identifying which dermatomes are blocked. The dermatomes that are blocked will produce an altered sensation on a patient's skin. When the frozen sachet is placed on the skin the patient may be unable to feel any sensation, they may only feel pressure on the skin without feeling the temperature of the sachet, or it may feel warm on the skin.

The sensory level must be assessed when a set of epidural observations are completed. The frequency of the observations is dictated by the epidural protocol (see intranet).

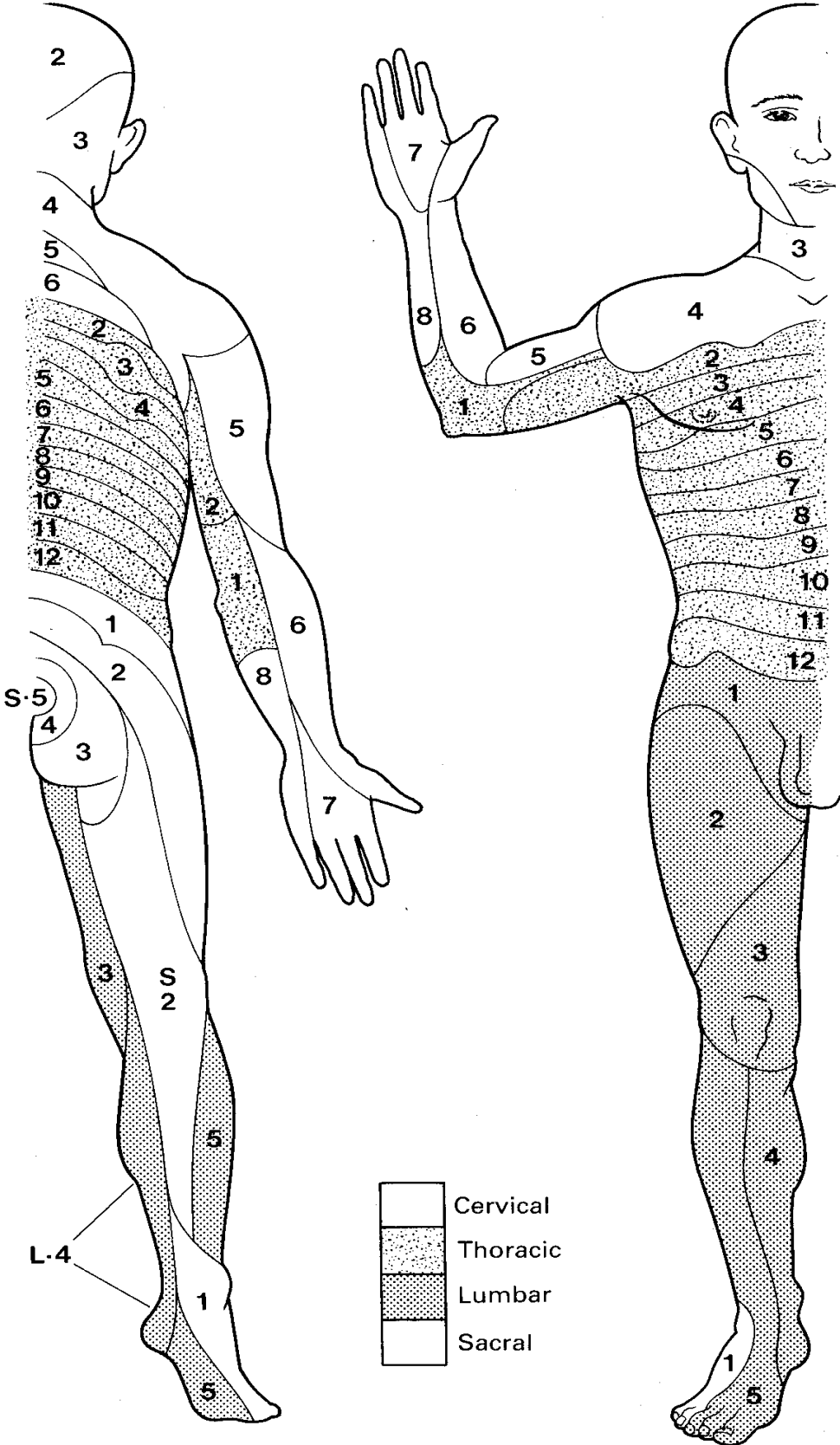
The epidural prescription chart has a diagram of a person with the dermatome levels clearly marked to aid you in your assessment and documentation.

Assessment

1. To assess the sensory levels use a frozen sachet of normal saline or ice cube, this must be discarded to minimise cross-infection.
2. Prior to assessing the sensory level, ensure you have patient's consent. Make certain their privacy and dignity is maintained through out the assessment, as it may be necessary to remove items of clothing.

3. Begin by placing the frozen sachet on the patient's forehead, this will ensure that the patient is aware of the temperature of the frozen sachet on an area unaffected by the epidural blockade.
4. The sensory level needs to be assessed on each side of the patient (i.e. right and left) and each side documented separately to determine if the blockade is bilateral or unilateral.
5. Stand on one side of the patient and start the assessment by placing the frozen sachet on the top of one thigh moving it upwards through each dermatome level. Ask the patient if the frozen sachet is as cold as when it was placed on their forehead.
6. The epidural blockade starts when the patient becomes unaware of the temperature of the frozen sachet (this is the lower level of the epidural blockade). Continue upwards placing the frozen sachet on each dermatome until the patient starts to feel the sachet as frozen again (this is the upper level of the epidural blockade).
7. The area of blockade will vary depending upon the level of epidural insertion (i.e. lumbar, abdominal or thoracic) and the amount of local anaesthetic/opiate given. The blockade should cover the area of the surgical incision / or the site of pain, without producing unwanted side effects. The epidural prescription chart will state the ideal upper level of the epidural blockade and at what level the Acute Pain Service or 1st on call anaesthetist should be contacted.
8. These levels should be documented on the yellow epidural prescription chart.

The Spinal Nerves



The segmental cutaneous supply of the body.