4 PAIN MANAGEMENT IN LABOUR

4.8 NEURAXIAL BLOCKADE

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4.8.4.2 Administration of Epidural Therapy – via Intermittent PCEA
Section B
Clinical Guidelines
King Edward Memorial Hospital
Perth Western Australia

4.8.4 ADMINISTRATION OF EPIDURAL THERAPY

4.8.4.2 VIA INTERMITTENT PCEA

AIM

To provide a means of epidural analgesia allowing women to control and self-administer their own analgesic requirements.

BACKGROUND INFORMATION

Patient-controlled epidural analgesia (PCEA), when compared to intermittent bolus doses and continuous infusion methods assists in reducing staff workloads by decreasing additional supplements. If compared to continuous epidural infusions the PCEA is shown to reduce drug consumption and additional doses, and delays the development of unwanted motor block.[1]

Evidence is now emerging that in certain circumstances a PCEA with a background of continuous epidural infusion may be beneficial, but the demand only PCEA alone can continue to provide good quality labour and birth analgesia[1]

KEY POINTS

Follow the Key Points in Clinical Guidelines, Section B, 4.8.4
Women must be mentally and physically capable of managing their own pain relief.[2]

	PROCEDURE	ADDITIONAL INFORMATION
1	**Preparation of the PCEA device**	
1.1	Prepare the medication as per instructions on the MR 280.	Two midwives should check the anaesthetic instructions, dosage and orders. Verify the woman's identification with the anaesthetic orders prior to commencing the PCEA.
1.2	Prime the PCEA device according to the manufacturer's instruction sheet provided.	

	PROCEDURE	ADDITIONAL INFORMATION
1.3	Connect the primed line to the epidural filter.	The patient button must be depressed when securing the demand syringe to the extension line. This vacuum ensures 4mL of the drug is transferred to the patient demand syringe. The first dose is ready for the patient in 15 minutes.
1.4	Sign MR280 Epidural/Spinal Analgesia Chart when the device is checked and connected.	Two staff members are required to sign this chart.
1.5	Apply the sticker to the syringe with information regarding the drug and quantity added to the PCEA.	
2	**Maternal instructions**	
	• Ensure the woman understands the instructions given by the anaesthetic Registrar / Consultant on how to use the PCEA.[3]	
	• Instruct the woman to advise the midwife if the PCEA is not providing adequate analgesia.[3]	
	• Provide reassurance to the woman about the safety features of the PCEA device.	The device provides a lockout interval which regulates the time between successful demands.
3	**Maternal Observations**	
3.1	***Demands and volume administered***	
	Record the demands and volume administered by the woman: • hourly for the first four hours • two hourly for the duration of the PCEA	
3.2	***Maternal observations***	
	Hourly observations for the duration of the PCEA: • pulse • conscious state • respirations	Midwifery staff instructions for care of a woman with an epidural/PCEA are on the reverse of the MR280 Epidural/Spinal Analgesia Chart.
	30 minutely observations for the duration of the PCEA: • blood pressure (BP)	The PCEA maintains a stable maternal haemodynamic status compared to the hypotension that is more likely to occur after epidural insertion. Hypotension is rare for women when using self-administered boluses.[4]

PROCEDURE	ADDITIONAL INFORMATION
Bolus top-up by staff: • BP and pulse should be done at 5, 10, 15, and 20 minutely after each bolus top-up.	Refer to Clinical Guidelines Section B 4.8.4.1 Via Intermittent Top Up for management of bolus top-ups
3.3 ***Pain score***	
Monitor the woman's pain score hourly. Give bolus top-ups for breakthrough pain. See Clinical Guidelines Section B 4.8.4.1 Via Intermittent Top Up.	Inadequate analgesia may be due to a mechanical problem such as a catheter kink, disconnection, or migration of the catheter.[5]
Notify the anaesthetic Registrar / Consultant if inadequate analgesia despite bolus top-up.	Consider evaluating the progress of labour if analgesia suddenly becomes ineffective.[6]
3.4 ***Dermatomes***	
Check dermatomes 20 minutes post top-up if the medication contains local anaesthetic.	Refer to Clinical Guidelines Section B 4.8.6 Testing Dermatomes.
3.5 ***Epidural site observation***	
Check the epidural site: • prior to administering a bolus top-up • at the beginning of each shift for the midwife • if the woman has ineffective analgesia	Check the epidural site to ensure the dressing remains intact, and that the epidural has not been dislodged.
3.6 ***Bladder management***	
• Monitor urinary output. • Observe for bladder distension. • Instruct the woman to notify midwifery staff if she has any voiding difficulties • See clinical guideline B 5.8.1 Care of the Woman during the First Stage of Labour for bladder management with an epidural	Dense or prolonged epidural analgesia may suppress the urge to void.[6]
3.7 ***Mobilisation with a PCEA***	
See Clinical Guidelines Section B 4.8.7 Assessment of Motor Function	
4 Refilling the syringe reservoir	
Refill the reservoir when the level is between 5mL and 10mL of medication left.	
5 Documentation	
Document all observations on the MR 280 Epidural/Spinal Analgesia Chart	

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