

PAIN MANAGEMENT IN LABOR

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PAIN MANAGEMENT IN LABOR

- Nonpharmacological
 - Efflurage
 - Massage by others
 - Counterpressure
 - Touch
 - Thermal stimulation
 - Accupressure
 - Hydrotherapy
 - Guided Imagery
 - Focal Point
 - Breathing Techniques



PHARMACOLOGIC PAIN MANAGEMENT

- Effect on the fetus
- Maternal physiologic alterations
- Effects on the course of labor
- Effects of complications
- Interactions with other substances



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Systemic Analgesia

- ❖ Route: typically administered parenterally through existing IV line
- ❖ Drugs (see Drug Guide 14.1)
 - Opioids (butorphanol, nalbuphine, meperidine, fentanyl)
 - Ataractics (hydroxyzine, promethazine)
 - Benzodiazepines (diazepam, midazolam)



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PAIN MANAGEMENT: SYSTEMIC DRUGS

- Parenteral analgesia (opioid analgesics)
 - Meperidine (Demerol)
 - Butorphanol (Stadol)
 - Nalbuphine (Nubain)
- Opioid antagonists
 - Naloxone (Narcan)
- Adjunctive drugs
 - Ondansetron (Zofran)
 - Metoclopramide (Reglan)
 - Diphenhydramine (Benadryl)
- Vasopressor
 - Phenylephrine



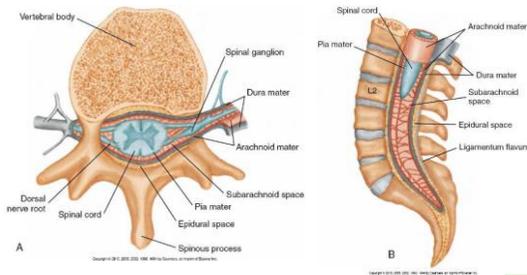
REGIONAL PAIN MANAGEMENT: EPIDURAL BLOCK

- Injecting a local anesthetic agent, often combined with an opioid, into epidural space
- Provides substantial relief of pain from contractions and birth canal distention
- Can be extended upward
- Analgesia, rather than full anesthesia
- Adequate pain relief without complete motor block



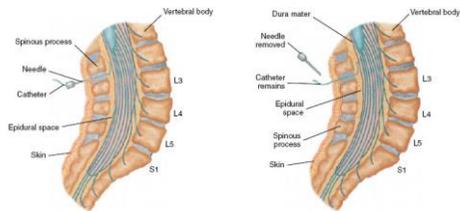
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EPIDURAL BLOCK



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EPIDURAL BLOCK (CONT.)



The epidural space is entered with a needle below where the spinal cord ends. A fine catheter is threaded through the needle. After the catheter is threaded into the epidural space, the needle is removed. Medication can then be injected into the epidural space intermittently or by continuous infusion for pain relief during labor and birth.

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REGIONAL PAIN MANAGEMENT: INTRATHECAL OPIOID ANALGESICS

- Injected into the subarachnoid space
- Much smaller doses than if given systemically
- Woman can feel her contractions
- Rapid onset of pain relief without sedation
- Can ambulate during labor
- No sympathetic block
- Limited duration of action
- Inadequate pain relief for late labor and the birth

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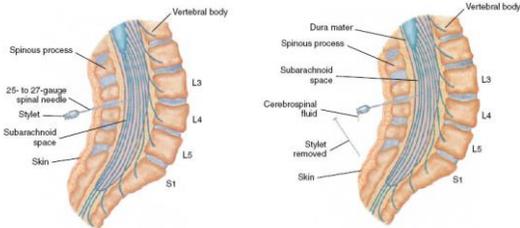
REGIONAL PAIN MANAGEMENT: SUBARACHNOID BLOCK

- Simpler procedure than the epidural block
- May be performed when a quick cesarean birth is necessary

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SUBARACHNOID BLOCK



A 25- to 27-gauge spinal needle with a stylet occluding its lumen is passed into the subarachnoid space below where the spinal cord ends.

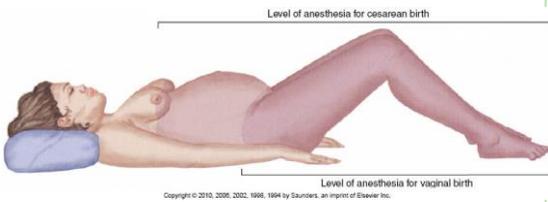
The stylet is removed, and one or more drops of clear cerebrospinal fluid at needle hub confirm correct needle placement. Medication is then injected, and the needle is removed.

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LEVEL OF ANESTHESIA



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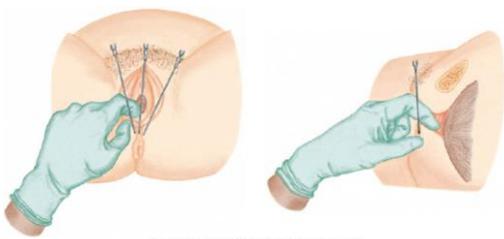
REGIONAL PAIN MANAGEMENT: LOCAL INFILTRATION ANESTHESIA

- o Local anesthetic
- o Just prior to episiotomy or suture of laceration
- o Does not alter pain from uterine contractions or distention of the vagina
- o Rarely has adverse effects on either mother or infant

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LOCAL ANESTHESIA



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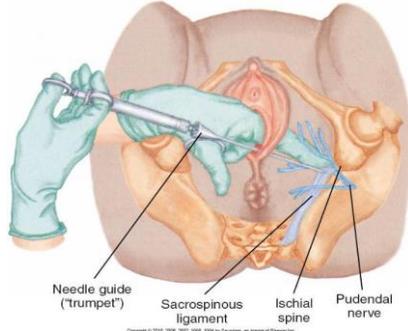
REGIONAL PAIN MANAGEMENT: PUDENDAL BLOCK

- o Anesthetizes the lower vagina and part of the perineum
- o Provides anesthesia for an episiotomy and vaginal birth
- o Does not block pain from uterine contractions
- o Mother feels pressure.

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PUDENDAL BLOCK



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General Anesthesia

- ❖ Emergency cesarean birth or woman with contraindication to use of regional anesthesia
- ❖ IV injection, inhalation, or both
- ❖ Commonly, first thiopental IV to produce unconsciousness
- ❖ Next, muscle relaxant
- ❖ Then intubation, followed by administration of nitrous oxide and oxygen; volatile halogenated agent also possible to produce amnesia
