

Labor Pain and Options for Pain Relief

Systemic Medications for Labor Pain and Distress

Type and Timing	Drugs Used	Benefits and/or Purposes	Possible Risks and/or Disadvantages	Additional Precautions/Procedures/Interventions
Sedatives/barbiturates <ul style="list-style-type: none"> Given by injection or pill. Early labor only 	<ul style="list-style-type: none"> pentobarbital (Nembutal) secobarbital (Seconal) amobarbital (Amytal) phenobarbital (Luminal) 	<ul style="list-style-type: none"> In smaller doses, have a sedative effect: reduce anxiety, irritability, and excitement. In larger doses, hypnotic: induce rest, relaxation, or sleep. They may be used to give the mother a rest by decreasing contractions in a slow, painful prelabor. 	<ul style="list-style-type: none"> <i>To mother:</i> Large doses may cause dizziness and disorientation and can slow labor by impairing uterine activity. <i>To baby:</i> May cause heart rate changes. May accumulate in fetal tissue and cause respiratory depression (very slow breathing), decreased responsiveness, and impaired suckling in the newborn. 	<ul style="list-style-type: none"> Should be used before 4 cm dilation. Should be discontinued before active labor to reduce effects on newborn. Oxygen and resuscitation equipment on hand if baby is born soon after barbiturates are given. <p><i>Note:</i> Rarely used today because of undesirable side effects.</p>
Tranquilizers <ul style="list-style-type: none"> Given by injection or pill. Early labor and after cesarean 	<p><i>Phenothiazines:</i></p> <ul style="list-style-type: none"> promethazine (Phenergan) prochlorperazine (Compazine) <p><i>Benzodiazepines:</i></p> <ul style="list-style-type: none"> midazolam (Versed) diazepam (Valium) <p><i>Other:</i></p> <ul style="list-style-type: none"> hydroxyzine (Vistaril or Atarax) 	<ul style="list-style-type: none"> Used to reduce tension, anxiety, nausea and vomiting. Sometimes combined with narcotics to enhance the effects of lower doses of narcotics (thus reducing narcotic side effects). Benzodiazepines are not used for labor because of risks to the baby. They are sometimes given after cesarean birth to reduce anxiety during the repair. 	<ul style="list-style-type: none"> <i>To mother:</i> May cause drowsiness, dizziness, blurred vision, confusion, dry mouth, changes in blood pressure and heart rate. When given with barbiturates or narcotics, may increase their effects. <i>To baby:</i> Phenothiazines can inhibit newborn reflexes and cause jaundice. Benzodiazepines in labor cause fetal heart rate alterations, poor muscle tone, sleepiness, and suckling difficulties. 	<ul style="list-style-type: none"> Should be discontinued before active labor to reduce effects on newborn. Oxygen and resuscitation equipment on hand if baby is born soon after these are given. Observation for and treatment of newborn jaundice <p><i>Note:</i> Because Versed causes loss of memory, many women ask that it not be given because they want to remember their first hours with their baby.</p>
Inhalation analgesia <ul style="list-style-type: none"> Self-administered by mother, who holds an oxygen mask to her face and inhales the medication as needed. Late labor or for brief painful procedures 	<ul style="list-style-type: none"> nitrous oxide and oxygen (Entonox) 	<ul style="list-style-type: none"> Takes effect almost immediately. Causes mother to feel drowsy, lightheaded, or giddy for about a minute. Does not take away pain, but mothers are less troubled by it. 	<ul style="list-style-type: none"> <i>To mother:</i> Some enjoy the mental effects, some do not. Nausea and vomiting for some women. Reduces mother's ability to push effectively. <i>To baby:</i> Little effect. 	<ul style="list-style-type: none"> Confinement to bed Mother should begin inhaling just before a contraction begins, so medication is in effect when contraction is at its peak. Rare in the United States. Common elsewhere.



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<p>Narcotic or narcotic-like analgesics</p> <ul style="list-style-type: none"> Given intra-venously, by direct injection, or injection into an IV line. Sometimes, patient-controlled analgesia (PCA) device is used. In early to active labor, when it's believed that the birth is at least 2 hours away. Also after cesarean birth 	<ul style="list-style-type: none"> morphine fentanyl (Sublimaze) meperidine (Demerol) butorphanol (Stadol) nalbuphine (Nubain) <p>(Stadol and Nubain are combination drugs—a narcotic plus a narcotic antagonist, which reduces some of the narcotic's undesirable side effects.)</p>	<ul style="list-style-type: none"> During active labor, reduce pain awareness and promote relaxation between contractions. Some may indirectly speed a labor that has been slowed by tension and stress. Large doses of narcotics (especially morphine) are sometimes used in a prolonged prelabor in hopes of stopping contractions and giving the mother a rest. Women report better pain relief and higher satisfaction when using PCA than when the nurse manages doses. 	<ul style="list-style-type: none"> <i>To mother:</i> May cause drowsiness, "high" feeling, hallucinations, dizziness, itching, nausea, vomiting, and slowing of digestion. May slow heart rate and lower blood pressure. Narcotics often interfere with mental activities and the use of self-help comfort measures. Narcotics may temporarily slow labor progress, especially if the medication is given before the active phase of labor. <i>To baby:</i> May make fetal heart rate readings appear abnormal, depress the newborn's respiration, and alter the baby's behavioral responses (for example, poor suckling) for several days or weeks. 	<ul style="list-style-type: none"> Usually, restriction to bed Continuous monitoring of fetal heart rate Reminders to mother to breathe deeply Maternal position changes or oxygen to improve FHR abnormalities Should be discontinued at least 2 hours before birth to reduce effects on newborn. Oxygen and resuscitation equipment on hand if baby is born within 4 hours after narcotics are given. Availability of narcotic antagonist for mother or baby, if necessary, to reverse side effects
<p>Narcotic antagonists</p> <ul style="list-style-type: none"> Given by injection into muscle or vein. If needed to reverse narcotic side effects on mother or baby 	<ul style="list-style-type: none"> naloxone (Narcan) 	<ul style="list-style-type: none"> Reduce narcotic effects such as hallucinations, itching, respiratory depression (very slow breathing), and low blood pressure. Narcan is given by injection to the laboring woman if there is narcotic toxicity or to the newborn when there are respiratory problems caused by narcotics. 	<ul style="list-style-type: none"> <i>To mother and baby:</i> Abrupt reversal of narcotic depression may result in rapid heart rate, increased blood pressure, nausea, vomiting, sweating, trembling, and the return of pain awareness. The effects of narcotics may return if narcotic antagonist wears off before the narcotic. 	<ul style="list-style-type: none"> Continued observation of mother or baby for return of narcotic side effects Repeated dose of narcotic antagonist as needed

In this chart, medications are listed with their generic (chemical) names first and their brand names in parentheses. For all medications, effects and side effects vary depending on the drug used, total dosage, timing, fetal condition, and the mother's individual response.

Sources

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