

## CHAPTER 11: LABOR PAIN AND OPTIONS FOR PAIN RELIEF

# Research Reviews of Effectiveness of Pain Coping Techniques

There have been several reviews of available research on each of the available coping techniques, as compared to “usual care.” Each of these reviews acknowledges the limitations of the research they compile: primarily, studies are small sample sizes and are not properly randomized control trials. So all conclusions come with the caveat that “more research is needed.” (*Note:* the birth ball results are based on a single study, rather than a review.)

This chart summarizes those reviews. It compares the following factors that might be desired outcomes of pain relief options: less pain intensity, less likelihood that the laboring mother will turn to pain medications (unless that was her goal), higher satisfaction with pain relief, shorter labor, higher chance of spontaneous vaginal delivery (versus instrumental delivery or cesarean), and less use of Pitocin to augment a slow labor.

Source	Less pain	Less pain meds	More satisfaction	Shorter labor	Spontaneous vaginal	Less Pitocin
Acupressure <sup>1</sup>	yes *					
Acupuncture <sup>2</sup>		yes				yes
Acupuncture <sup>3</sup>	yes	yes *	yes *		yes *	
Aromatherapy <sup>4</sup>	NSD					
Aromatherapy <sup>5</sup>	NSD	NSD		NSD	NSD	
Birth ball <sup>6</sup>	yes *			NSD		
Continuous support <sup>7</sup>		yes	yes	yes	yes	yes
Epidural and pain meds <sup>8</sup>	yes	N/A	yes	no	no	no
Hypnosis <sup>9</sup>	yes *	NSD	NSD	yes *	NSD	
Hypnosis <sup>10</sup>		yes	yes		yes	yes
Immersion in water <sup>11</sup>		yes			NSD	
Massage <sup>12</sup>	yes					
Music / audio analgesia <sup>13</sup>	NSD	NSD			NSD	
Positions and movement <sup>14</sup>		yes		yes	yes	
Relaxation <sup>15</sup>	yes		yes		yes	
Sterile water injections <sup>16</sup>	yes				NSD	
Sterile water injections <sup>17</sup>	yes				yes	
TENS <sup>18</sup>	yes *				NSD	
Yoga <sup>19</sup>	yes		yes	yes		

\* means limited data; NSD means there may have been a difference, but it wasn't statistically significant

*Endnotes*

1. Caroline A. Smith et al., "Acupuncture or Acupressure for Pain Management in Labour," *Cochrane Database of Systematic Reviews*, no. 7 (July 2011), doi:10.1002/14651858.CD009232.
2. Caroline A. Smith et al., "Complementary and Alternative Therapies for Pain Management in Labour (Review)," *The Cochrane Library*, no. 4 (2006), <http://www.meridiens.org/obslille/GYNCO-OBS/SMITH-141481.pdf>.
3. See note 1 above.
4. See note 2 above.
5. Caroline A. Smith, Carmel T. Collins, and Caroline A. Crowther, "Aromatherapy for Pain Management in Labour," *Cochrane Database of Systematic Reviews*, no. 7 (July 2011), doi:10.1002/14651858.CD009215.
6. S. Taavoni et al., "Effect of Birth Ball Usage on Pain in the Active Phase of Labor: A Randomized Controlled Trial," *Journal of Midwifery & Women's Health* 56, no. 2 (2011): 137–40, <http://www.medscape.com/medline/abstract/21429078>.
7. E. D. Hodnett et al., "Continuous Support for Women during Childbirth," *Cochrane Database of Systematic Reviews*, no. 7 (July 2013), doi:10.1002/14651858.CD003766.pub5.
8. Leanne Jones, "Pain Management for Women in Labour: An Overview of Systematic Reviews," *Cochrane Database of Systematic Reviews*, no. 3 (March 2012), doi:10.1002/14651858.CD009234.pub2.
9. Kelly Madden et al., "Hypnosis for Pain Management during Labour and Childbirth," *Cochrane Database of Systematic Reviews*, no. 11 (November 2012), doi:10.1002/14651858.CD009356.pub2.
10. See note 2 above.
11. Elizabeth R. Cluett and Ethel Burns, "Immersion in Water in Labour and Birth," *Cochrane Database of Systematic Reviews*, no. 2 (April 2009), doi:10.1002/14651858.CD000111.pub3.
12. Caroline A. Smith, "Massage, Reflexology and Other Manual Methods for Pain Management in Labour," *Cochrane Database of Systematic Reviews*, no. 2 (February 2012), doi:10.1002/14651858.CD009290.pub2.
13. Caroline A. Smith et al., "Relaxation Techniques for Pain Management in Labour," *Cochrane Database of Systematic Reviews*, no. 12 (December 2011), doi:10.1002/14651858.CD009514.
14. Annemarie Lawrence et al., "Maternal Positions and Mobility during First Stage Labour," *Cochrane Database of Systematic Reviews*, no. 10 (October 2013), doi:10.1002/14651858.CD003934.pub4.
15. See note 13 above.
16. Sheena Derry et al., "Intracutaneous or Subcutaneous Sterile Water Injection Compared with Blinded Controls for Pain Management in Labour," *Cochrane Database of Systematic Reviews*, no. 1 (January 2012), doi:10.1002/14651858.CD009107.pub2.
17. E. K. Hutton et al., "Sterile Water Injection for Labour Pain: A Systematic Review and Meta-analysis of Randomised Controlled Trials," *BJOG* 116, no. 9 (2009): 1158–66, <http://onlinelibrary.wiley.com/doi/10.1111/j.1471-0528.2009.02221.x/full>.
18. Therese Dowswell et al., "Transcutaneous Electrical Nerve Stimulation (TENS) for Pain Management in Labour," *Cochrane Database of Systematic Reviews*, no. 2 (April 2009), doi:10.1002/14651858.CD007214.pub2.
19. See note 13 above.