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[*] There is sufficient evidence and support for use of pharmacologic and nonpharmacologic interventions to holistically manage neonatal pain. Combined analgesia, including pharmaceuticals and nonpharmacologic interventions (such as swaddling, sucking, and sucrose), are recommended during the procedure to provide holistic pain management.

[†] EMLA is approved for use in infants age 37 or more weeks of gestation, provided practitioners follow recommendations regarding maximal dose and limits for exposure time to the medication. In addition, practitioners are advised not to use EMLA with infants who are receiving potentially methemoglobinemia-inducing medications, such as acetaminophen or phenobarbital. Although the package insert warns that patients taking acetaminophen are at greater risk for developing methemoglobinemia, there have been no reported cases of this complication occurring in children taking acetaminophen and using EMLA.

Four types of anesthesia and analgesia are used in newborns undergoing circumcision: ring block, dorsal penile nerve block (DPNB), topical anesthetic such as EMLA (prilocaine–lidocaine) or LMX4 (4% lidocaine), and concentrated oral sucrose. Oral acetaminophen and comfort measures (such as music, sucking on a pacifier, and soothing voices) have not proved to be effective in reducing the pain of circumcision when used alone. The Cochrane group exploring pain relief for neonatal circumcision found that DPNB was the most effective intervention for decreasing the pain of circumcision (Brady-Fryer, Wiebe, and Lander, 2009).

Circumcision should not be performed immediately after delivery because of neonates' unstable physiologic status and increased susceptibility to stress. Preoperative nursing care usually includes allowing the infant nothing by mouth before the procedure to prevent aspiration of vomitus (≈2 hours); however, the necessity of this practice has been questioned (Kraft, 2003). Additional measures include the surgical time-out, checking for a signed consent form, and adequately restraining the infant, usually on a