Anesthesia and Brain Development of Your Child

On Dec. 14, 2016 the U.S. Food and Drug Administration (FDA) issued a safety announcement regarding the potential effect of anesthetics on children younger than 3 years of age. Recent studies suggest that a single, relatively short exposure to general anesthetic and sedation drugs in infants or toddlers is unlikely to have negative effects on behavior or learning. To better inform the public about this potential risk, we have taken points from the FDA’s communication and are sharing those with families to help them make educated decisions about the care of their young child.

Facts About General Anesthetic and Sedation Drugs

* General anesthetic and sedation drugs are used to put infants and children into a deep sleep so they do not feel pain during surgery or procedures.
* These drugs are usually injected into a vein or inhaled through a mask or breathing tube.
* General anesthetic drugs are used in millions of children every year to ensure their health, safety and comfort during surgery and other procedures.

Additional Information for Parents and Caregivers

* Anesthetic and sedation drugs are necessary for infants and children who require surgery or other painful or stressful procedures. Additionally, untreated pain can be harmful to children and their developing nervous systems.
* Research suggests that repeated or prolonged use of general anesthetic or sedative drugs may have negative effects on the developing brain. These effects are subtle and may include learning, memory, or behavior problems.
* The FDA has issued a warning that this may affect children younger than 3 years who are undergoing anesthesia for more than three hours, or are exposed to repeated anesthetics.
* Recent studies in children suggest that a single, short duration exposure to general anesthetic and sedation drugs under age 3 years is unlikely to have negative effects on behavior or learning.
* No specific anesthetic or sedative medications have been shown to be safer than any other.
* Parents and caregivers should ask for information about the planned surgery or procedure, including the likely duration of surgery and the need, if any, for repeated procedures. Parents should also discuss with their child’s health care professional the potential adverse effects of anesthesia on brain development and appropriate timing of procedures that can be delayed without jeopardizing their child’s health. Pregnant women should have similar conversations with their health care professionals.

FDA Website. <https://www.fda.gov/Drugs/DrugSafety/ucm532356.htm?source=govdelivery&utm_medium=email&utm_source=govdelivery>