Anesthesia and neurodevelopment in children

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Each year, millions of infants and children undergo surgery, diagnostic and interventional procedures under anesthesia and sedation. Concern has been raised about the effect of anesthetic drugs on brain development. It has been shown that these medications affect the developing brain of different non-human species. It usually results in behavior, learning and memory abnormalities. The different human studies suggest that similar problems may occur in young children exposed to these drugs. However, recent large scale prospective studies did not find correlation between anesthesia exposure and poor neurodevelopmental outcome. Future research may clarify this important issue.

Biography

Yaacov Gozal is an Associate Professor of Anesthesiology at the Hebrew University, Jerusalem. He is the Chair of the Department of Anesthesiology, Perioperative Medicine and Pain Treatment and Director of the operating rooms at Shaare Zedek Medical Center, Jerusalem, Israel. He has published more than 100 peer reviewed papers and serves as an Editorial Board Member of the Journal of Pharmacology and Toxicology.

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