

## General-Anesthesia Long-Term Effects on the Brain in Children and Elders

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### Abstract

General anesthetic has many affects when given, most are positive and make the patient feel good during and after surgery. However, more recent studies have suggested there are some negative long-term effects on children and elders brain development. Researchers have found that young children who go under general anesthetic multiple times have a higher chance of developing learning disorders and ADHD. They also found that elders that go under general anesthetic for major surgeries have been linked to them developing postoperative cognitive disorder (POCD) or postoperative delirium (POD). Lastly, general anesthetic causes neurotoxicity in the brain and affects the brains neuron development and synapsis. Given this information, it can be suggested that general anesthesia has short-term effects on the brain, but it can also cause long-term effects at various ages.