

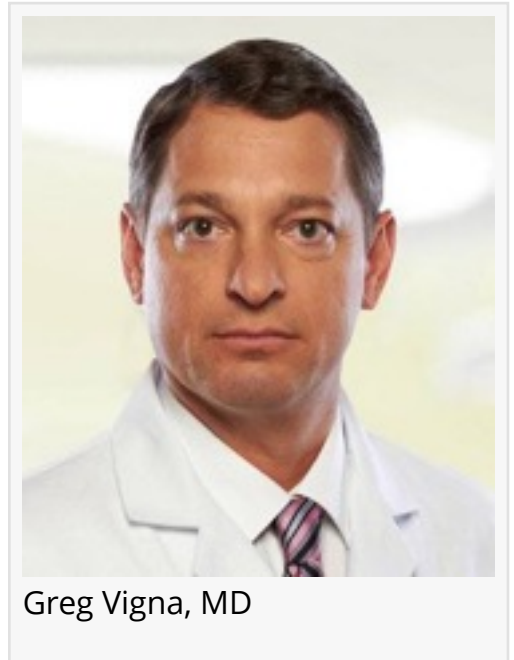
Autism Spectrum Disorder and Other Motor-cognitive Impairment: Hypoxic versus Non-Hypoxic

Brain development in children with neonatal encephalopathy is impaired, with potential risks for autism and cognitive disorders

SANTA BARBARA, CA, UNITED STATES, February 27, 2025

/EINPresswire.com/ -- "Our findings demonstrate that, despite the manifest successes of therapeutic hypothermia, brain development is impaired in these children," states Dr. Ela Chakkarapani, Pediatrics and Neonatology.

[Dr. Greg Vigna](#), Board Certified in Physical Medicine and Rehabilitation, national birth injury attorney says, "Children who required therapeutic cooling may be spared the diagnosis of cerebral palsy, but clearly are at risk for autism spectrum disorder or reduced cognitive and motor abilities. Now, with diffusion weighted imaging, there can be objective testing to identify brain damage that accounts for the other clinical presentations of hypoxic ischemic encephalopathy in those who don't meet the clinical diagnosis of cerebral palsy that may include autism spectrum disorder."



Greg Vigna, MD

What did Dr. Chakkarapani report in the article "Disrupted brain connectivity in children treated with therapeutic hypothermia for neonatal encephalopathy" published in *NeuroImage: Clinical* 30 (2021) 102582?:

“

Children who required therapeutic cooling may be spared the diagnosis of cerebral palsy, but clearly are at risk for autism spectrum disorder or reduced cognitive and motor abilities.”

Greg Vigna, MD

“We acquired diffusion-weighted imaging data from school-age children without cerebral palsy treated with therapeutic hypothermia for neonatal encephalopathy at birth, and a matched control group.

Network-based statistic analysis implicated brain regions involved in visuo-spatial processing and attention, aligning with previous behavioral findings. These included the

precuneus, thalamus, left superior parietal gyrus and left inferior temporal gyrus.

Our findings demonstrate that, despite the manifest successes of therapeutic hypothermia, brain development is impaired in these children.”

Read Dr. Chakkarapani’s article:

<https://www.sciencedirect.com/science/article/pii/S2213158221000267>

Dr. Vigna adds, “It has been known that low APGARs are associated with autism spectrum disorder and cerebral palsy. Now, there is a growing body of literature that is identifying abnormalities on diffusion weighted imaging in the gray-white matter boundary in children with autism spectrum disorder. The gray-white matter boundary is another watershed area of the brain that is vulnerable in hypoxic ischemic encephalopathy.”

Dr. Vigna concludes, “Hypoxic ischemic encephalopathy brain damage that is confirmed with diffusion weighted imaging in the gray-white matter regions is a substantial factor in causing autism spectrum disorder, and other cognitive, motor, and visual spatial disorders. There is a path to compensation for those injured during difficult deliveries caused by the negligence of medical professionals who don’t meet the clinical diagnosis of cerebral palsy but have other diagnoses that include autism spectrum disorder.”

Read about Apgar score and risk of autism: <https://link.springer.com/article/10.1007/s10654-018-0445-1>

Read “Atypical measures of diffusion at the gray-white matter boundary in autism spectrum disorder in adulthood”: <https://onlinelibrary.wiley.com/doi/full/10.1002/hbm.25237>

Read Dr. Vigna's "[The Mother’s Guide to Birth Injury.](#)”

Dr. Vigna is a California and Washington DC lawyer who focuses on neurological injuries caused by medical negligence. He is a birth injury attorney. [Ben Martin Law Group](#) is a national pharmaceutical injury and birth injury law firm in Dallas, Texas. The attorneys are product liability and medical malpractice attorneys, and they represent neurological injuries across the country.

Greg Vigna, MD, JD

Vigna Law Group

+1 8178099023

[email us here](#)

Visit us on social media:

[Facebook](#)

[X](#)

[LinkedIn](#)

This press release can be viewed online at: <https://www.einpresswire.com/article/789788000>

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.

© 1995-2025 Newsmatics Inc. All Right Reserved.