

# Vein of Galen malformation (VOGM)



**Boston Children's Hospital**  
Cerebrovascular Surgery &  
Interventions Center

[bostonchildrens.org/VOGM](http://bostonchildrens.org/VOGM) | 617-919-1379

A vein of Galen malformation is an abnormal connection between arteries and veins in the brain that causes blood to bypass capillaries, which facilitate the exchange of oxygen, nutrients, and waste products with surrounding tissue.

This abnormal connection can lead to significant overflow and abnormally high pressures in the brain's veins, potentially causing heart failure, brain injuries, developmental concerns, or other neurological problems.

## A family-centered approach to care

Through regular discussions with our multidisciplinary team, parents play a key role in developing a personalized treatment plan and are actively involved in decision-making during the entire care process.

## Pioneering treatments and producing exceptional outcomes

We've developed the world's first in-utero interventional approach to treating vein of Galen malformations through embolization.

This IRB- and FDA-approved trial is offered to parents who fit the criteria and who consult with us through the Boston Children's Maternal Fetal Care Center, in affiliation with Brigham and Women's Hospital.



Baby Denver received a first-of-its-kind fetal intervention for VOGM through a collaboration at Boston Children's.

## Our Approach to VOGM

### The Cerebrovascular Surgery & Interventions Center

at Boston Children's Hospital is a global leader in diagnosing and treating VOGM. Center co-director **Darren Orbach, MD, PhD**, is a pioneer in treating this aggressive form of vascular malformation. However, effective care for VOGM requires expertise in many specialties, including pediatric cardiology, neonatology, anesthesiology, hematology, neurology, neurosurgery, and neuroradiology. Because of our high patient volume, each member of our specialist team is among the most experienced in the world in caring for VOGM.

### What sets us apart

Vein of Galen malformation is most often discovered just before birth or just after, when a baby gets sick. At the Cerebrovascular Surgery and Interventions Center, almost all our patients are referred while in utero, positioning us to offer care sooner and to avoid potentially fatal symptoms after delivery. Compared to other centers, our patients are 1.8 times as likely to survive and emerge from childhood free of serious neurological or cognitive impairment.