

Portable MRI (pMRI) for Pediatric Hypoxic Ischemic Brain Injury (HIBI): pMRI for pHIBI

Targeting Early Diagnosis to Improve Outcomes

The developing brain of a child is very sensitive to lack of oxygen and blood flow, and this can cause a specific type of Pediatric Acute Brain Injury (PediABI) called hypoxic ischemic brain injury (HIBI). HIBI can cause lifelong complications, so early detection and treatment of is very important.

There are limitations to the current ways that the medical team uses radiology images to understanding the situation, identify the problem, and see how it changes or improves over time.

These limitations can include:

- The sedation medication your child may need can make it hard for the medical team to check with their physical exams for brain injury symptoms
- There are risks that can come from moving sick children to the radiology area for imaging
- There isn't one type of bedside radiology imaging that is able to see all types of brain injuries at all times.



Your child may be able to help!

Your child can give research samples and health information during their hospitalization. The samples and information will be used for research now and in the future (if you give additional permission) to learn more about how to detect and treat brain injury in children. Anything saved will have a special number assigned to protect their privacy.

Contributions will include:

Research Samples:

Leftover blood other body fluids that are no longer needed for your child's medical care and would otherwise be discarded by your nurse or from the lab

Collection of Health Information:

Information about your child's traits, medical diagnosis, laboratory test results, medication information, and body measurements like heartrate, blood pressure, and urine amounts.



Collection of Radiology Images:

Doctor-ordered head CT scans, Brain MRIs, Head Ultrasounds



Dr. Jessica Wallisch, MD
Principal Investigator, Pediatric
Neurocritical Care Physician
jwallisch@cmh.edu
(816) 816-7929

CriticalCareResearch@cmh.edu



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KANSAS CITY
Research Institute



Portable MRI (pMRI)



The pMRI machine used in this research study is called the Swoop Hyperfine.

This is an FDA-cleared portable MRI machine that has already been studied and approved for use in patients of all ages.

Please access the following resources (website link or QR code link) provided by the Swoop Hyperfine manufacturer to learn more about the machine and what to expect during a pMRI scan:

pMRI in children:

[pMRI in pediatrics](#)



Frequently Asked Questions:

[pMRI FAQs](#)



Dr. Jessica Wallisch, MD
Principal Investigator, Critical and
Neurocritical Care Physician
(816) 816-7929
jwallisch@cmh.edu
CriticalCareResearch@cmh.edu

FDA-approval Information:

[pMRI regulatory clearances](#)



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