**Research Explained**

**Toward Standardization of Care: The Feeding Readiness Assessment after Congenital Cardiac Surgery**

Ehrmann DE, Mulvahill M, Harendt S, Church J, Stimmler A, Vichayavilas P, Batz S, Rodgers J, DiMaria M, Jaggers J, Barrett C, Kaufman J

Published in *Congenital Heart Disease,* Jan 2018

*This Research Explained was prepared by*

*Jessica Church (author), Jeffrey Weiner, MD (clinician), Mariel Spengler (parent)*

**About this Study**

**Why is this study important?**

* Babies under 3 months of age often have trouble eating by mouth after cardiac surgery. Many of them need a feeding tube when they go home. The decisions about feeding can be complicated, and it is hard to predict who will have feeding difficulties. To help make our care consistent, a feeding protocol, or a standard way to approach the care of children with feeding problems after heart surgery was created.
* The feeding protocol was not always followed and practices varied among providers even after the feeding protocol was introduced. This may have led to longer stays in the hospital. This study aimed to find a better way to evaluate how a baby feeds after surgery and make sure that providers do things in a similar way.

**How was this study performed?**

* Patients from birth to 3 months of age in 2015 after their first cardiac surgery were identified at this hospital.
* All babies admitted to the cardiac intensive care unit are seen by the feeding team of occupational and speech therapists, who evaluate their ability to safely eat by.
* There was a specific scale used to look at the babies’ feeding skills and they were given a score, called a “feeding readiness assessment” or FRA score.
	+ The FRA scores were looked at before surgery and 1, 2, and 3 weeks after surgery.
	+ These scores were used along with other measures to determine who may need a G-tube (gastrostomy tube) placed before going home from the hospital.

**What were the results of the research?**

* 69 patients were evaluated in this study and 46% of the patients were considered single ventricles (such as hypoplastic left heart syndrome).
* 42% of this group (or 29 patients) had a G-tube placed.
	+ The patients more likely to have a G-tube placed were those that were younger, had single ventricle anatomy, and underwent a higher risk operation.
	+ The feeding readiness scores most able to predict who may need a GT were the ones immediately before surgery and 1 week after surgery.

**What are the limitations of this study?**

* The study was only done at one center, therefore it may not be the same at other hospitals.
* The study also did not look at other reasons to need a feeding tube other than feeding skills.
* Lastly, during the time period of this study, babies with nasogastric (NG) tubes were not discharged, therefore other types of feeding tubes besides G-tubes were not assessed.

**What is the impact of this study?**

* This study shows the importance of keeping a consistent approach. Using the Feeding Readiness Assessment score to evaluate feeding makes care more reliable for each patient.
	+ The Feeding Readiness Assessment score can also help to predict which patients may have feeding problems for a long time.
* Sharing a standard way of practice for a complex group of patients with feeding difficulties.
* The team could have earlier discussions about the option of long-term feeding tubes and communicate with families more regularly.