A Narrative Review of Early Nutrition in Infant after Cardiovascular Surgery

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Introduction:
Early nutrition is important for neonate or infant with congenital heart disease. However, few have been known about the knowledge of nutrition in neonate or infant after their complex heart surgery in critical care.

Methods:
This study was conducted in a narrative literature review method. A comprehensive search of four electronic databases (PUBMIED, MEDLINE, CIHNAL, Cochrane Library) was undertaken between 1990 to 2014. Inclusion criteria were research papers related to outcomes in pediatric patients after cardiovascular surgery, incorporating enteral feeding or nutrition in critic care.

Results:
Eighteen research articles and two review articles met the criteria were selected to be discussed. Three themes were emerged from the literature review: (1) Variance affects the weight in congenital heart infants. (2) Implementing advancement and progressive feeding protocol after surgery could be benefit on decreasing hospital or ICU length of stay, gaining weight at discharge, avoiding on incidence of necrotizing enterocolitis and better life of quality on sleep. (3) Addressing on home-monitoring or project after discharge to Norwood stage II.

Conclusions:
Most research has been addressed on the nutrition in infant with congenital heart disease in their recovery period after cardiovascular surgery except for patients in critical care. The future research could be focused on approaching the knowledge of factors associated successful enteral feeding or initial feeding time in neonate or infant after cardiovascular surgery in critical care.