



Nutrition Guidelines for Neonates with Critical (requires intervention in first 30 days of life) Congenital Heart Disease (CCHD): Post-Operative Phase

Notes: (1) This document provides a general guideline and variations can occur based on professional judgment to meet individual patient needs. (2) This is a quality improvement document and should not be a part of the patient's medical record.

Post-Operative Phase

Goals:

Weight Gain of 25-35 gm/day
Caloric Intake of 90-110kcal/kg(PN)
120-150kcal/kg(EN)

- TFV including drips/lines= 2/3 maintenance (within 48° daily advance toward 120ml/kg/day)
- Restart TPN POD#1 (See TPN guidelines)
- Daily weights, weekly HC and length

Evaluate readiness for Enteral Nutrition (EN)

- Closed sternum
- Lactate <2
- pH >7.3
- UO >1ml/kg/hr
- Abdominal girth is not >10% baseline
- No signs of infection/↓cardiac output: Thrombocytopenia, Fever, Tachypnea, NIRS change >15%, CRT >4 sec

YES

Initiate EN

- Initiate trophic rate of 10- 20 ml/kg/day (do not include in TFV)
- MBM/Donor milk preferred; alternatively, Semi-elemental formula
- Limit 20 ml/kg/day with UAC or HFNC 6L/min
- Continue TPN

Tolerating Enteral Feeds?

NO

Feeding Intolerance Plan

- Hold feeds
- Monitor abd girth q6 hours until full volume tolerated for 24 hours, hold feeds if increased by 10%
- Reassess feeding tolerance q6hours
- trial post-pyloric feeds
- KUB if concern for NEC:

NO

° -NEC: bowel regimen (prune juice, Miralax, Colace, Senna), discuss motility agent, hold feeds 4 hours before restarting at same rate

YES

° +NEC: NPO, TPN, antibiotics, Peds Surgery consult

Advancement of EN

- Increase feeds by 20ml/kg every 24 hours or as tolerated with goal volume of 120ml/kg/day
- Titrate TPN volume (1:1) once patient tolerating 40 ml/kg/day

Once tolerating 120 ml/kg/day consider fortifying/concentration by 2 kcal/oz q 24 hrs to goal (Max concentration up to 28 kcal/oz)

Transition to q3° bolus feeds over 2° and compress to goal of 30 minutes

Refer to Oral Feeding Protocol for Neonates with CCHD

Reevaluate EN readiness daily

NO

Continue TPN and lipids

Signs and symptoms of feeding intolerance

- Increased girth by 10% in 12 hours
- Decreased bowel sounds
- Evidence of GI obstruction
- Vomiting/diarrhea >2 episodes/shift (in the absence of narcotic withdrawal)
- Bloody stool
- Suspicion of NEC

Reassess feeding tolerance every 6 hours

