

Cardiology Case Study:

Pt is a 1 day old male with birthweight of 3042 grams prenatally diagnosed with HLHS who is PGE dependent. He will be scheduled for his Norwood procedure within the first 1-2 weeks of life. Mom plans on breast feeding and pumping.

1. What pathway (high vs standard risk) will he follow?

- High Risk

2. What is your nutrition prescription for calories, protein and fluid?

- 90-110 kcal/kg (REE x 1.6-2)
- 1.5-3 g/kg (DRI x 1-2)
- >100 ml/kg per Holliday Segar; no more than 120 ml/kg d/t tenuous fluid balance with CHD.

3. What are the initial feeding recommendations?

- TPN: 90-110 kcals/day. Goal GIR 10-12 mg/kg/min, AA 3 g/kg, SMOF 3 g/kg
- No trophic/tube feeds.
- Consult SLP to assess suck/cry and develop cue based feeding plan. Goal for PO is practice only.

After his Norwood procedure and extubation, he was transitioned to PO/NG feeds. Current weight is 3.3 kg.

1. What are your recommendations for feeds?

- 20 cal/oz HM advanced to 130 ml/kg or 55 ml q 3 hours to provide 133 ml/kg and 89 kcal/kg.
- Allow breast feeding if medically appropriate per medical team and SLP.

At about 1 month of age, Pt is on full feeds but noted to be down 40 grams over the past week with variable weight trends at 1 month of life. Current wt is 3.5 kg.

1. What are your recommendations?

- Fortify to 24 cal/oz HM with Enfamil NeuroPro Infant at goal of 130 ml/kg or 55 ml q 3 hours to provide 127 ml/kg and 101 kcal/kg.
- Will need to monitor fluids with weight gain and advance feeds with growth to maintain 130 ml/kg.
- Continue allowing breast feeding if appropriate per medical team and SLP but limit to 1-2x/day to optimize calorie intake.

-Pt continued to be followed in the interstage clinic. He was admitted for his Glenn at about 3 months of age. Following the procedure, NG feeds to be started. Current weight is 4.8 kg.

1. What are your feeding recommendations?

- Resume feeds with unfortified HM or Enfamil NeuroPro Infant and follow feeding pathway for advancements; goal 80 ml q 3 hours to provide 133 ml/kg and 89 kcal/kg.
- Will need to monitor wt trends for need to fortify or advance fluids if okay with cardiology.