

## CASE STUDY A

# A CASE OF FEEDING DIFFICULTIES IN A CARDIOLOGY INFANT

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### CLINICAL PRESENTATION

The family noticed within a few weeks that this patient was struggling with feeds and although support was provided the mother felt breastfeeding was unsuccessful and changed to exclusive standard infant formula feeds. The local health visitor observed difficulty with feeding and gave standard advice. At 4 weeks of age, she was admitted with a viral illness and during the admission the medical team observed her to be tachypneic. Various diagnostic tests including an echocardiogram were arranged which confirmed a Ventricular Septal Defect (VSD).

### FEEDING HISTORY

At this stage her feeding pattern and volumes were sporadic and her weight had not increased significantly from birth. Her intakes were on average 110 mL/kg/day providing 75 kcal/kg/day. At 7 weeks, after consistently unsuccessfully achieving adequate volumes to meet her target requirement of 120kcal/kg/day, a specialized formula designed for catch-up growth was introduced. This was built up over 3 days with decreasing the frequency of standard infant formula and replacing bottles with Fortini™.

There were no signs of poor tolerance in terms of gastrointestinal symptoms or a change in frequency of stools, however her tolerance to volumes through tiring remained. Her discharge from hospital was being delayed by failure to achieve adequate milk volumes and the decision was made for nasogastric tube (NGT) placement. The family were trained and she was discharged on 3 hourly feeds offered orally first over 20 mins with the remainder given as a gravity bolus via the NGT.

### WEIGHT HISTORY

After 3 weeks post discharge and establishment of high-energy formula (10 weeks of age), her weight gain velocity trend had stabilized and her weight gain was now steadily tracking between 2<sup>nd</sup>-9<sup>th</sup> centile. Overall the family reported tolerance was good and tube feeds were still required. She had weekly weight checks via the health visitor and stayed in contact with the Dietetic team via community nurse reviews and consultant outpatient reviews.

Cardiac surgery was agreed for several months later unless required sooner. At 13 weeks, she went into cardiac failure and at 14 weeks surgical repair was completed. Following surgery, she managed volumes better orally and the NG tube was removed. At 17 weeks, the weight pattern began to significantly improve. Solids were started at 18 weeks and the opportunity was taken to fortify her foods with Fortini to maximize her intake.

### CONCLUSION

Her weight gain pattern continued to improve and she gained on average 12 g/kg/day crossing up the centiles to her proportional position. At 39 weeks (see WHO growth chart), Fortini was phased out and she returned to a standard infant formula. Weekly weights were taken for the following 3 weeks by her health visitor and her weight pattern and velocity were successfully maintained.



