Child E was hyperglycaemic and required insulin on occasion.

2nd August 2015 — Child E was developing a mild oxygen requirement (23% into the incubator) and was still on 0.5ml EBM 2 hourly. Abdomen was soft with no distension. Plan: limited septic screen but to do LP if CRP was high. If oxygen requirement up to 28%, for chest x ray.

3rd August 2015 – pharmacist has documented in the medical notes noting cefotaxime commenced, and to consider adding Teicoplanin as the baby had a long line in situ (as per Late Onset Neonatal Sepsis policy).

The pharmacist's advice was considered by the ST4 who commented that Teicoplanin had not been added as the baby had only been screened for the oxygen requirement and was otherwise clinically well.

The baby was tolerating 1ml EBM x 2 hourly. It was noted that the feeds could be increased to 2ml x 2hourly if abdomen remained soft and no increase in naso gastric aspirates. The baby was examined at 14.10 hours and was noted to have good tone and movements, and was handling appropriately. He was noted to have a soft abdomen which was not distended. He hadn't had his bowels open but bowel sounds were present and there were no suspicious aspirates. Therefore the plan was to increase his feeds to 2ml x 2 hourly. 14.50 hours — insulin was recommenced as blood sugar had increased.

19.30 hours seen by ST1 who noted a 24 hr CRP of <1 and the oxygen requirement was improving

22.10 hours, ST4 was asked to review the baby as he had had a gastric bleed at approximately 21.40 hours. He was alert, pink and well perfused with CRT <2. The baby's abdomen was soft, not distended and bowel sounds were heard.

A diagnosis of GI bleed was made, ? cause. The plan was for IV ranitidine, add metronidazole (at risk of NEC) and for close observation. Consultant Paediatrician was updated and was happy with this plan.

At 23.00 hours there was a further GI bleed and the baby desaturated to 70%. 13ml of blood stained fluid was obtained from the NGT on free drainage. The baby's blood pressure remained stable (Mean BP 43) and he had a heart rate of 140-160, with SaO2 60-70% in 100% FiO2. The baby was making a good respiratory effort and was crying.

The plan was to replace losses and for elective intubation with drugs. For CXR and AXR. To discuss the baby with surgeons once had x rays. Consultant Paediatrician updated and happy with plan.

The baby had a sudden deterioration at 23.40 hours with a bradycardia down to 80 - 90 bpm and SaO2 of 60% with poor perfusion. There was a noted colour change over the abdomen, purple discoloured patches.

The baby was intubated as an emergency at 23.45 hours. There was good air entry and chest movement, and a colour change was seen on capnograph to confirm the tube was in. The baby continued to have SaO2 60 – 70% which improved to 80% following a bolus of morphine.

The purple discolouration of the abdomen remained. The mean BP dropped to 36 (cuff BP). The plan was for a further bolus of 10ml/kg. Inotropes were not given as it was noted that may worsen bleeding. Administration of FFP was considered, but there was no coagulation screen – bloods were sent for urgent coagulation and cross match.

Consultant Paediatrician updated. Was happy with management and advised would come and review the baby.

Consultant arrived at approximately 00.25 hours and documented in retrospect. She noted the CXR showed the ETT was in a good position and the NGT was in the stomach. Baby on Cefotaxime and metronidazole; to add teicoplanin but did not have a chance to administer as baby deteriorated.

00.36 hours – poor saturations, poor perfusion. This was followed by cardiac arrest. CPR and resuscitation commenced:

5 x adrenaline

- 2 x sodium bicarb
- 1 x dextrose bolus
- 1 x saline bolus
- 1 x blood bolus

Weak heart rate obtained approximately 30 minutes into resuscitation but rapidly lost this and required CPR again. Discussed with parents. Decision made to stop resuscitation after 45 minutes and death was confirmed at 01.40 hours on 4th August 2015.

Discussed with Coroner. No PM/inquest required

Assessment The initial impression is that Child E had NEC

Immediate Action taken following incident