Case: A term newborn was appealed to our emergency service, with dyspnea and supraventricular tachycardia was diagnosed on 13th postnatal day. After intervention, multiorgan failure developed in our patient. At his postnatal day 27, vvHDF was performed. The patient died because of ventilator associated pneumonia.

Conclusion Continuous vvHDF application should be considered in the neonatal period, in cases where it is impossible to apply PD. Due to the technical difficulties in the neonatal period, such application is not common but it is also life saving.

REFERENCES
2 Great Ormond Street Hospital, Consent Policy, September 2012

Background and aims Temperature control during therapeutic hypothermia in newborns with hypoxic ischaemic encephalopathy needs to be monitored with great care since this treatment can cause serious side effects. The temperature measured in the pulmonary artery is considered the ‘gold standard’; however, this is not suited to patients in the NICU. A reliable and less invasive method is the temperature measured in the oesophagus.

Aim We hypothesised temperature measurements during hypothermia using an oesophageal probe reflects higher temperatures than measurements using a rectal probe.

Methods 20 newborns treated with hypothermia were provided with a continuous rectal temperature probe as well as an oesophageal temperature probe. Both measurements were registered over a period of 72 h of hypothermic therapy.

Results Linear multilevel regression analysis revealed significant associations between rectal and oesophageal temperatures. We recorded a mean difference per degree between rectal and oesophageal temperatures of 0.12°C. This difference is 0.17°C higher during the cooling phase when compared to the rewarming phase.

Conclusion The differences between oesophageal and rectal temperatures do not result in any clinical effects. Temperature control during hypothermia can be done with either an oesophageal probe or a rectal probe; however, in order to reduce the risk of inadequate cooling due to a defective or dislocated probe, it is safer to use both probes simultaneously.