- Any variations in practice according to the level of care and in the different nations of the UK.

Methods

- Read Literature on neonatal blood culture bottle use to inform questionnaire design.
- Telephone survey Feb–March 2014.
- Interviewee: medical staff or nurse-in-charge only.

Results

- All 204 neonatal units were surveyed.
- Number using single = 197/204 (96.1%); paired =8/204 (3.9%).
- 11/197 using single, occationally use paired.
- Paired: England 3/170 (1.8%); Scotland 2/15 (13.4%); Wales 0/12 and NI 3/7 (42%) (Figure 1).
- Level of care: NICU 2/55(3.6%), LNU 5/90(5.6%) and SCBU 1/59(1.7%) (Figure 2).

Conclusions

- There is general uniformity in the type of bottle used- single aerobic bottles.
- As the 'gold standard' investigation for neonatal sepsis, it needs to follow evidence-based traditions to improve yield.
- There is a need to be aware of when an anaerobic bottle should be included rather than a 'box-standard' approach.

PO-0534 PREDICTIVE VALUES OF PRENATAL AND NEONATAL TESTING INDICATIONS FOR THE DIAGNOSIS OF CONGENITAL CYTOMEGALOVIRUS (CMV) INFECTION

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Background and aims Despite its major public health impact, there is currently no official screening policy to identify Congenital CMV Infection (CCI) and neonatal testing is based mostly on clinical indications. We aimed to characterise the currently employed clinical indications for CMV testing in neonatal urine samples, and to examine their positive predictive values.

Methods All prenatal and neonatal records of newborns that had urine sample analysed for congenital CMV between 2009 and 2013 at the Virology Laboratory, Hadassah Medical Centre, Jerusalem, Israel, were retrospectively reviewed. The clinical indications for CCI evaluation were obtained, and their positive predictive values were determined.

Abstract PO-0534 Table 1 Clinical indications tested for congenital CMV infection

Clinical indication	% of all urine samples	Positive predictive value (%)	95% CI
Maternal seroconversion	41.7	7	[5.9–7.6]
IUGR/SGA	38	1.6	[0.8–2.7]
Failed OAE screening	10.4	2.9	[1.1–6.5]
Head circumference <10th percentile	9.7	1.9	[0.5–5.4]
Thrombocytopenia	6.3	4.3	[1.8–6.7]

Results Of 1625 neonates tested, 58 (3.56%) were positive for CCI. The leading clinical indications for testing and their positive predictive values are shown in the Table.

Interestingly, we further identified differences in the distribution and predictive values of the clinical indications between ethnic subpopulations.

Conclusions As suspected maternal CMV infection during pregnancy yielded the highest predictive value and detection rate of CCI, we suggest that in the absence of general neonatal screening policy, prenatal maternal CMV screening should be considered as a primary option for the early identification of CCI. The cost-benefit of this screening approach needs further evaluation.

PO-0535 SUSTAINABLE REDUCTION OF POSITIVE BLOOD CULTURES IN A TERTIARY NEONATAL INTENSIVE CARE UNIT: IMPACT OF INFECTION PREVENTION AND CONTROL MEASURES OVER A 5 YEAR PERIOD

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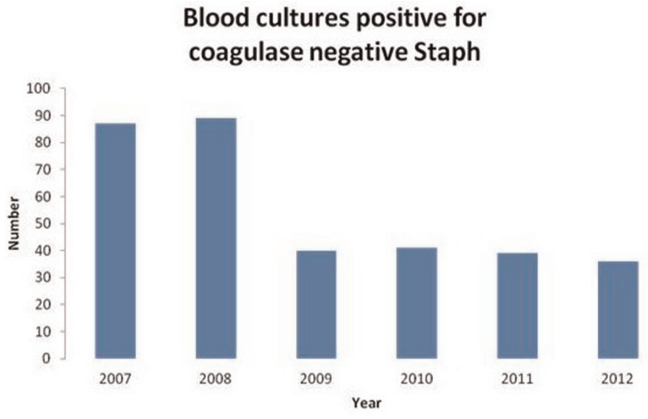
Background and aims Infection is one of the major causes of mortality and morbidity amongst preterm babies in neonatal intensive care units (NICUs). Preterm babies have immature immune systems, poor skin integrity and have repeated invasive procedures making them vulnerable to blood stream infections. Hand hygiene, low nurse: patient ratios, environmental colonisation (especially of water systems) and injudicious use of antibiotics, all contribute to infection in preterm babies.

The NICU at Homerton University Hospital, is a large tertiary level unit serving a high-risk population. In October 2005, we discussed the Epic Guidelines and introduced a number of infection care bundles with the aim to reduce the number of positive blood cultures.

Method From 2005 to 2007, we adapted the adult visual inspection score (VIP) for peripheral IV cannulae. From 2008 to 2010 the care bundles included dedicated cleaned trollies with sterile packs for insertion of intravenous cannulas, blood cultures and obtaining blood samples from arterial lines and we used a closed system of suctioning and closed system to sample arterial blood. We used sterile cotton wool for taking blood from heel prick. In May 2010 we introduced 0.5% chlorhexidine for all



Abstract PO-0535 Figure 1