**PO-0572** UMBILICAL VENOUS CATHETERS WITH AGION ANTIMICROBIAL SYSTEM IN A DUTCH NICU

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**Background** The majority of preterm infants at NICUs receives a central venous, or umbilical vein catheter (UVC) and is therefore at risk for catheter-associated sepsis. Silver-impregnated UVCs with the AglON™ antimicrobial system may prevent sepsis and may have longer insertion time.

**Objective** To assess sepsis and additional CVC insertion with the use of silver-impregnated UVCs compared with conventional ones.

**Methods** Catheter-duration, sepsis and additional CVC use was compared between infants with silver-impregnated UVCs (silver-group) during 1 year (2012–2013) and infants with conventional UVCs (controls) during 2011, when inserted >3 days.

**Results** In 156/249 (2012–2013) infants a silver-impregnated and all 273 with an UVC in 2011 a conventional UVC was inserted. Mean catheter-duration was 5.8 (3–15) days in the silver-group vs 5.7 (3–12) days in the controls (NS). 11/156 (7%) infants from the silvergroup developed sepsis compared with catheterisation vs 17/267 (6.4%) controls [NS]. Main causative microorganisms: CoNS (62.5%), S. aureus (15.6%), Enterobacter (9.3%). In 22/156 infants of the silvergroup, UVC use was longer than 8 days, vs in 20/273 controls (NS). 3/22 of the silvergroup with UVC use > 8 days developed sepsis vs 1/273 controls (p = 0.015). Significant more infants in the silvergroup needed additional CVC insertion 18/156 (11.5%) vs in 28/273 (10.3%) controls (p = 0.000).

**Conclusions** Duration of > 8 days of silver-impregnated UVC significantly increased the risk for sepsis as compared with conventional UVC use.

Silver-impregnated UVCs were not inserted for longer periods than conventional UVCs.

**Anti-infectious advantage of the silver-impregnated UVCs could not be proven.**

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**PO-0574** INDICATIONS AND OUTCOMES OF LUMBAR PUNCTURES IN TERM NEONATES IN A TERTIARY NEONATAL UNIT

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**Background** Lumbar puncture (LP) is usually performed when there is a clinical suspicion of meningitis in babies with suspected sepsis. NICE recently published their guidelines on ‘antibiotics for early-onset neonatal infections’ with guidance on when LPs should be considered.

**Aim** To audit the indications and outcomes of LPs performed in term babies (>37 + 0 weeks) in a tertiary neonatal unit.

**Methods** A list of term babies who had an LP was obtained from the Microbiology Department between 01/01/2010 and 31/12/2013. The Badger electronic patient record and hospital blood results systems were reviewed to collect the data.

**Results** In the last 4 years we had 2,882 term babies admitted to the neonatal unit. 136 LPs were performed in 133 term babies. The reasons for LPs were: (a) raised CRP in 106 cases (median CRP was 70), (b) abnormal neurology in 28 cases and (d) 4 were for no other clinical focus. There was one culture of coliforms and another positive for herpes simplex virus type 1 on PCR. At discharge, 8 had a diagnosis of meningitis and 1 with encephalitis.

**Conclusion** The predominant indication for LPs in term babies was a raised CRP. We only isolated organisms from two samples. As per NICE guidance, we rely on a combination of clinical findings and CRPs when deciding which term babies to LP.