Probiotics

Background:
Strong evidence now exists that probiotics significantly reduce NEC and mortality in preterm babies (1). There is also evidence that they improve feed tolerance and are safe (2). The use of Infloran (Lactobacillus acidophilus / Bifidobacterium infantis) is established (3). Reduction in bacterial diversity through the use of antibiotics is harmful and can lead to significant morbidity and mortality (4).

Options:
Any baby born <34 weeks or <1500 g
± Any other baby admitted to NICU and given antibiotics (Consultant Decision)

Administration of Infloran®
No parental consent is needed, but an information leaflet is provided in each admission pack.

Infloran® capsules (Probiotic) (250mg) capsule
Contents: Lactobacillus acidophilus and Bifidobacterium bifidum
Each half-capsule contains approx 10^9 colony forming units (cfu)

Excipients include lactose and sucrose

Storage: +2°C - +8°C (i.e. in drug fridge)
Please store away from IV preparations and avoid cross contamination

All babies <34 weeks gestation or birth weight <1500g who have commenced enteral feeds. Omit if baby is nil by mouth (discuss with consultant).

1. Prescribe on drug chart as Infloran: Half a capsule twice a day
2. Administration – Add the contents of half a capsule of Infloran® to EBM (minimum feed volume 2.5ml) in a sterile galipot prior to feeds. Give as a bolus immediately prior to feeds (do not add to continuous feeds). If the baby changes to formula feeds later Infloran® can be added to that (minimum 2.5ml for half a capsule). Administer via a nasogastric tube immediately. If the baby is feeding independently give orally via an oral syringe.
3. Remaining contents of capsule may be given to another baby.
4. Standard infection control measures apply. Standard safety checks should be performed as with other medications.
5. Preparation of probiotics should be carried out to avoid cross contamination and disposal of any excess product should be carried out in to designated sharp bins and should not be tipped in to sinks.
6. Probiotic use should not influence decisions regarding the rate of increase of enteral feeding. This remains as directed by the consultant in charge.
Licensing
Inflloran® is not licensed as a medicine in the UK; it is categorised as a food product. However, for safety and quality control reasons probiotics will be subject to the same strict regulation controls as any other drug in the hospital.

When to stop probiotics:
Consider withholding in any baby who is seriously unwell, septicaemic, and/or has NEC – please discuss with attending consultant.

Stop on discharge home. If being transferred to another hospital, the probiotic may be given on the day of transfer if due, but will not be continued in the receiving hospital unless they also have a policy of giving probiotics.

References
(1) Probiotics for the prevention of NEC in preterm infants. AlFaleh K, Anabrees J. Cochrane 2014 [LINK](1)
(3) Hartel C et al. Prophylactic Use of Lactobacillus acidophilus/Bifidobacterium infantis Probiotics and Outcome in Very Low Birth Weight Infants J. Pediatrics (165),2,285-289 August 2014 [LINK](3)

Guideline
Written by Dr Peter Reynolds, Neonatal Consultant
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V5 Updated November 2015 (increased minimum volume of dilution)
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