

Probiotics - Information for parents

‘Getting the right gut bacteria from the start’

We understand that having a premature baby is difficult and stressful. Your views are most important and we want to keep you fully informed about how we plan to care for your baby. Here we explain some important feeding issues in premature babies. We wish to inform you that we plan to use a probiotic product with the aim of protecting your baby and improving feeding outcomes.

What is different about feeding premature babies?

We know that premature babies tolerate milk best if it is introduced gradually. Until they are able to tolerate enough milk, we feed most premature babies with a special intravenous liquid feed called Parenteral Nutrition (“PN”). This liquid feed contains protein, energy, fat, vitamins and minerals to help your baby to grow.

Some babies find digesting milk difficult and take longer than others to manage this. Most babies remain very well, but around 5-10% of premature babies become unwell with a condition called ‘NEC’ (**N**ecrotising **E**ntero**C**olitis) in which there is inflammation of the gut. Most babies who get NEC recover fully, but it can sometimes be serious, sometimes needs an operation, and can occasionally be life-threatening.

What can we do to try and prevent NEC?

Your choice in how you will feed your baby is one important factor. Breast milk is the best milk for your baby. It reduces the risks of bowel problems including NEC. Even small amounts of breast milk are important for your baby. Early expression of breast milk starting as soon as possible after birth and ongoing frequent expression of breast milk are important for optimal early nutrition of your baby and successful lactation. We will support and encourage you if you choose to express breast milk. If you are unable to or choose not to express breast milk we will advise on the most suitable alternatives.

Probiotics

There is now strong evidence that giving preterm babies small amounts of ‘healthy’ bacteria in their milk (like those bacteria found in live yoghurts and probiotic drinks that are now available in our supermarkets) reduces the risk of NEC, including in babies fed breast milk. Some neonatal units in the UK now give probiotics routinely to preterm babies, though it is not yet widespread practice in all units. Studies are still taking place, but already there is very good scientific evidence to show that probiotics prevent some babies getting NEC. We have also seen a halving of NEC and sepsis cases in our own unit in the 5-year period since we started giving probiotics routinely compared with the previous 5-year period. We consider it important to share this information with you.

What do we know about probiotics and preterm babies?

Probiotics to prevent NEC have now been studied in well over 10000 preterm babies. The accumulated evidence clearly shows that probiotic bacteria (specifically species of *bifidobacterium* and *lactobacillus*) are effective in reducing the incidence of NEC by more than

50%, and so reduce mortality. *This means that probiotics appear to protect babies against NEC and improve their survival chances.* Babies who got probiotics developed serious NEC half as often as those not given probiotics. Of all premature babies studied so far, no serious side effects have been seen with probiotics.

Are there any risks of getting probiotics?

There is a very small risk that a baby may actually get an infection from the probiotic bacteria. While occasional cases have been reported rarely, there were no cases among any of the 10000+ babies studied in the clinical trials. Also there have been no cases to date in our own unit's experience of giving probiotics to several hundred babies since January 2013. In the unlikely event that an infection happened we have antibiotics available that kill probiotic bacteria. Rare cases of blood stream infection reported so far were relatively minor and easy to treat.

Are there any risks from not getting probiotics?

If your baby does not get probiotics, current evidence suggests that, on average, he/she may be at an increased risk of developing NEC compared to a baby of similar size/gestational age that is given probiotics. However, most premature babies do not get NEC even without probiotics, and giving probiotics will not prevent all cases of NEC.

What is being offered?

We believe your baby may benefit from probiotics. Our routine practice is to start giving probiotics as drops as soon as a baby is ready to receive their first colostrum/milk feeds. We would plan to carry on giving probiotics daily along with milk feeds until your baby reaches around 34 weeks corrected age, or until their discharge/transfer, whichever is sooner. If your baby is transferred back to another hospital before 34 weeks corrected age, because probiotics are not yet widely used in all other UK neonatal units, it is possible that ongoing probiotic treatment will not be available after transfer.

Although probiotics are classed as food supplements in the UK, the production and quality control of the probiotic we will give to your baby meets the highest standards as used in the manufacture of drug products.

Please let the doctor or nurse looking after your baby know if you do not want your baby to be given probiotics.

If you are unsure, or wish to discuss this with a senior doctor, please let the nurse caring for your baby know.

What if I want more information or have any questions?

Please tell the nurse or doctor looking after your baby that you would like more information.

Thank you for reading this leaflet.

Neonatal Unit Nurses and Doctors

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