090

PROBIOTICS - TIME TO START USING THEM

N. Embleton[1,2]

[1]*Newcastle upon Tyne Hospital NHS Foundation Trust,* [2]*Newcastle University, Newcastle upon Tyne, UK*

Systematic reviews indicate that prophylactic probiotics could prevent thousands of deaths in preterm infants each year. Wider introduction of probiotics is warranted within a rigorous framework of audit and further research, and respect for parents' preferences. Systematic reviews indicate that probiotic prophylaxis halves NEC and all-cause mortality, without measurable adverse short-term effects. Clinicians agree the evidence is promising but disagree on whether to make probiotics routinely available. The methodology used in many studies, meta-analyses and reviews has been justifiably criticised, and further large RCTs are in progress. Unless new RCTs find evidence of harm, or opposite effects, they are unlikely to refute the current meta-analyses. New RCTs may not be large enough to identify rare but serious adverse effects, may not identify optimal regimes, or have sufficient power to examine long-term outcome. There will remain many un-answered and important questions around safety, efficacy, timing, dose, species or species combination, the populations in which benefit/harm ratios are optimal, long-term outcomes and NICU cross contamination. Whilst more research must be a key neonatal priority, there is not a compelling argument to further delay clinical use. Current research frameworks encourage parent/public involvement in the design of studies, but parents generally have little role in determining research priorities or in the interpretation of research studies - this needs to change. The weight, or significance, which individuals place on rare but serious outcomes (e.g. NEC) compared to more common but less serious problems (e.g. allergy) must, in part, determine which interventions are offered.