

The ON TRACK Network

June 2017



Newsletter
Edition 11



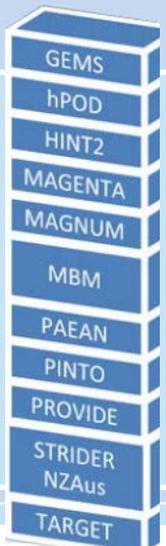
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Welcome to the June edition of the ON TRACK Network newsletter

ON TRACK News

- ❖ Katie Groom provided an update on the ON TRACK Network at the PSNZ Meeting in Wellington this month, great to see several of the Site Network Leaders there.
- ❖ PSNZ have agreed to host the ON TRACK Network on the PSNZ website - our pages should be live & ready to use very soon.
- ❖ The GEMS Study, running in Auckland and Counties Manukau DHBs, has now recruited over 1300 women. Well done to all involved!



The ON TRACK Trial Development Workshop Here are two more trial concept summaries from our February meeting.



Decreasing CS. Dr. Flora Gastrell & colleagues from Nelson Marlborough DHB were keen to develop a trial to reduce intrapartum CS rates in low risk primiparous women.

By spending two days working through their project at the workshop they now plan to progress this as a quality improvement project. They will design a package of care aimed at lowering CS rates in this group of women and by audit will compare CS rates before and after implementation of the package of care, hoping to achieve a reduction in CS rates from 40% to 30%. **Flora would be very happy to hear from any DHBs interested in joining this project** flora.gastrell@nmhs.govt.nz

Prophylactic caffeine citrate in late preterm babies: a randomised controlled dose-finding trial (the Latte Study).

Dr. Jane Alsweiler from the University of Auckland was the lead investigator for this proposal which aims to determine whether caffeine citrate reduces the frequency of intermittent hypoxaemia in babies born late preterm (34⁺⁰-36⁺⁶ weeks).

Late preterm babies make up 6% of all babies born in New Zealand, and are at increased risk of neurodevelopmental impairment compared to term babies, but the mechanism for this is unknown. We do know that late preterm babies have more frequent intermittent hypoxaemia than babies born at term and that intermittent hypoxaemia has been associated with poor neurodevelopmental outcomes in some populations. Caffeine citrate reduces intermittent hypoxaemia and improves neurodevelopmental outcomes in very preterm babies, but there are no data on its effectiveness in late preterm babies.

The investigators, with the help of the OTN workshop are developing a trial protocol designed to determine (1) whether caffeine citrate does reduce the frequency of intermittent hypoxaemia, and (2) if it does, what the optimal dose of caffeine citrate in late preterm babies should be. Eligible babies will be randomised to placebo or one of 3 daily caffeine citrate doses. The primary outcome will be intermittent hypoxaemia (reduction in oxygen saturation >10% below baseline). If this trial shows that caffeine citrate reduces intermittent hypoxaemia in late preterm babies it will provide data to inform a larger multi-centre randomised trial on the effect of prophylactic caffeine citrate on neurodevelopment in this vulnerable population.

Featuring...

The Different Approaches to Moderate & late preterm Nutrition: Determinants of feed tolerance, body composition and development trial

DIAMOND

Moderate-late preterm babies have an increased risk of adverse neurodevelopmental outcomes, cardiovascular disease, obesity and diabetes. The Diamond Trial is assessing the impact of different feeding strategies on body composition, feed tolerance, the microbiome and neurodevelopmental outcomes.

Three different interventions are being studied in a factorial trial; the use of amino acid solution vs 10% dextrose for IV nutrition, supplementary milk vs waiting for breastmilk and the use of taste/smell stimulus vs no taste/smell before feeds. The primary outcomes are percentage fat mass at 4 months corrected age and time to full enteral feeds. Secondary outcomes include time to full sucking feeds, length of hospital stay, neurodevelopmental assessment, and gut microbial composition and activity.

This trial is underway at Counties Manakau and Auckland DHB. A total of 528 babies will be recruited across these two sites. Its early days but 11 babies have already been recruited.

Lead Investigators: Professor Frank Bloomfield, Tanith Alexander

For further information contact: diamond.trial@auckland.ac.nz

Inclusion criteria:

- Infants born between 32⁺⁰ - 35⁺⁶ weeks
- Mother intends to breast-feed
- Admitted to the Neonatal Care Unit
- Requires insertion of intravenous line for clinical reasons

Upcoming Events

The PSANZ IMPACT Network are hosting a **Concept Development Workshop** in Sydney 2-3 August. This will be a great opportunity to observe the process of multicentre trial development or you may be interested in joining one of the investigator teams!

Concepts that will be considered include; creatine supplementation to reduce fetal compromise caused by hypoxia; neonatal pre-transfusion red cell washing; early restoration of circadian rhythms for the preterm neonate; integrating risk assessment to reduce adverse outcomes in preeclampsia; oral vs IV iron for the treatment of iron-deficiency anaemia in pregnancy & a sleep in pregnancy pillow.

<https://impact.psanz.com.au/meetings-and-events/impact-network-workshops/>



Update Your Practice

Dextrose gel treatment does not impair subsequent feeding

Neonatal hypoglycaemia is a common condition, with an associated increased risk of developmental delay.

Treatment with dextrose gel is used as first line treatment for hypoglycaemia in an increasing number of New Zealand institutions; however, one study found that it may be associated with reduced volume taken in bottle fed babies.

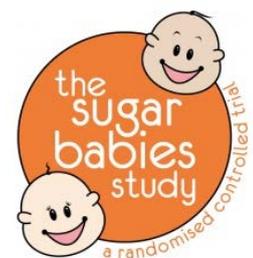
This paper published just last month includes a secondary analysis of 'The Sugar Babies Study, a RCT which compared the use of dextrose gel with placebo in babies at risk for neonatal hypoglycemia.

The Sugar Babies study took place at Waikato Hospital between December 2008 & November 2010. Babies at risk of neonatal hypoglycaemia (gestational diabetes, late preterm, SGA and LGA) were eligible for inclusion. Hypoglycaemic babies (<2.6 mmol/L) were randomised to dextrose gel (200mg/kg) or placebo. Feeding data were available for 211/237 (89%) of the babies recruited.

Results: Breastfed babies were more likely to have good feeding scores after dextrose gel, with no significant difference in breastfeeding duration or volume of formula taken.

Philip Weston, Deborah Harris, Jane Harding

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What does this mean? Practitioners can reassure women that dextrose gel is an effective treatment for neonatal hypoglycaemia, and does not interfere with successful breastfeeding. Further information on the use of dextrose gel is available through the University of Auckland website, which has summarised the earlier evidence in a clinical guideline.
<http://www.fmhs.auckland.ac.nz/clinicalpracticeguidelines>