

NT DIABETES IN PREGNANCY PARTNERSHIP NEWSLETTER – SEPTEMBER 2014

The NT Diabetes in Pregnancy Partnership is currently preparing for the annual stakeholders forum in Alice Springs in October in collaboration with the Baker IDI Educational Symposium – “Cardiovascular Disease and Diabetes – A Whole of Life Approach” to be held 23rd & 24th October.

<http://www.bakeridi.edu.au/symposium2014/>

NT DIP CLINICAL REGISTER NEWS

The number of women being referred to the NT DIP Clinical Register continues to increase and we now have over 880 women entered on to the register. There have been some issues with the electronic referrals which we are currently addressing but clinic staff have continued to refer – thank you! Don't forget you can always print out a referral from the NT DIP Clinical Register site:

http://www.health.nt.gov.au/Chronic_Conditions/Diabetes_in_Pregnancy_Clinical_Register/index.aspx

TOP END NT DIP CLINICAL REGISTER REGIONAL MEETING

The first regional meeting was held on August 22nd at Remote Health in Darwin. Clinicians from Royal Darwin Hospital, Katherine District Hospital, Top End Remote Health, Katherine West Health Board, Sunrise and Midwifery Group Practice either dialed in or attended.

The Top End and NT Clinical Register reports were discussed with reference to clinical practice that was supported by Dr Lis Young's presentation regarding the electronic Diabetes in Pregnancy Care Plans for PCIS, currently being developed with assistance from Steve Schatz. The larger than expected number of Indigenous women with type 2 in pregnancy continues to be a point of discussion and is reflected in the care plans which brings to our attention the importance of pre-conception care and post-natal follow-up. This is often referred to as inter-pregnancy management and is the focus of the Thursday afternoon workshop at BakerIDI Education Symposium on October 23rd: How the management is undertaken and by whom brings different partners to the table with synergies of child & maternal health and chronic disease.

MODELS OF CARE

Education for health professionals and communication around clinical care continues to be the focus of this part of the partnership. Education opportunities for health professionals are increasing with the annual forum, clinical register regional meetings expanding to include a workshop, collaboration with preventable chronic diseases for an electronic learning module and two one-day workshops with DoH midwives. Other collaborative activities include the development of the diabetes in pregnancy care plans as above and continuing work and review on local and NT wide guidelines regarding diabetes in pregnancy.

PANDORA (PREGNANCY AND NEONATAL DIABETES OUTCOMES IN REMOTE AUSTRALIA)

The research arm of the partnership is progressing well with recruitment on track (600 women have now consented) and follow-up of the women and babies is under way in the Top End and Central Australia.

Details about PANDORA – “what we are collecting and why?”

The research staff in Darwin were recently asked this by some colleagues and we thought it was a good time to revisit this question. The information for the study is collected by the PANDORA team:

Central Australia – Stacey Svenson, Paula Van Dokkum (Alice Springs).

Top End – Marie Kirkwood, Vanya Hampton, Liz Davis (Darwin) Gabs Bourke (Gove).

Dr Amy Tai and Dr Sarah Koffman are both assisting with consenting women to PANDORA in Katherine.

GABS BOURKE AND
MARIE KIRKWOOD



LIS YOUNG AND STEVE SCHATZ



Pregnancy & Birth: Once the woman has consented to PANDORA, the team collects routine clinical information which is the same as that collected for the clinical register about the woman's diabetes status, her pregnancy and birth details (mode of delivery, baby's weight, length, any abnormalities and breast feeding status).

Other clinical information collected by the team includes more detailed maternal medical and obstetric information including the birth, for example birth complications and reasons for mode of delivery. In addition to this, the team undertakes questionnaires with the women regarding socio-economic status, nutrition, activity levels during pregnancy and a PHQ-9 to assess stress levels. Neonatal anthropometric measurements are taken within 72 hours post-delivery. This involves weight, length, head circumference and skinfold thickness using calipers.

The anthropometric measurements of the neonate will be used to monitor the growth trajectory of the baby over subsequent years and assess for any association between body composition of neonates born to women with diabetes and health outcomes. Dr Danielle Longmore (paediatric endocrinologist) is undertaking this topic as part of her PhD with the PANDORA study.

At birth, cord blood is collected by the attending midwife – thank you midwives. The cord blood is sent to the RDH and ASH laboratory for processing, a task that has been done with great efficiency and little fuss – thank you Lab staff. The cord blood is currently being analyzed for glucose and C-peptide. It tells us about the baby's glucose metabolism whilst being exposed to maternal hyperglycaemia in-utero, without having to undertake venipuncture on the baby.



Follow-up: Collection of information regarding the health of the mother and baby at 6 weeks, 6 months and 2 years is undertaken via survey monkey, phone calls and electronic records search. This includes maternal information such as contraception, smoking status, diabetes and cardiovascular status, breastfeeding, weight and medications. Neonatal health information such as hospitalizations, medical conditions, growth and dietary intake are also collected.

For more information on the PANDORA methods please see our publication: Maple-Brown, L., Brown, A., Lee, I-L., Connors, C., Oats, J., McIntyre, H.D., et al. (2013) Pregnancy and Neonatal Diabetes Outcomes in Remote Australia (PANDORA) study. *BMC Pregnancy & Childbirth*, 13:221

PANDORA AT AUSTRALIAN DIABETES SOCIETY MEETING 2014

Dr I-Lynn Lee (endocrinologist RDH and PhD candidate, PANDORA) and Dr Kannan Bakthavatsalam (endocrinology registrar, RDH) presented results from the PANDORA study at the ADS meeting in Melbourne in August.

Dr Lee gave an oral presentation "Maternal and birth outcomes of women with diabetes in pregnancy in the Northern Territory: PANDORA Study". Her presentation compared maternal characteristics and birth outcomes of mothers with GDM and T2DM in pregnancy in the NT. Early results showed that maternal age was similar but BMI and nulliparity were significantly higher in women with type 2 as was the rates of pre-clampsia, caesarean section, large for gestational age and birth weight z-score. Still- birth was more frequent in the T2DM group.

Dr Bakthavatsalam's poster "Albuminuria in pregnant women with type 2 diabetes in the Northern Territory" was well received at the meeting as the first to report albuminuria rates in Australian Indigenous and non-Indigenous pregnant women with type 2 diabetes. Early analysis suggests that the rates of macroalbuminuria to be higher in Indigenous pregnant women with T2DM compared to reported studies from other countries.

DR KANNAN BAKTHAVATSALAM
AND DR I-LYNN LEE



23-24 October 2014

BakerIDI Educational Symposium,
Alice Springs
(Includes NT DIP Partnership stakeholders forum
and meetings on 24 October).

DIARY DATES

14 November, 2014 (12noon – 3pm)

Top End NT DIP Clinical Register
Regional Meeting & Workshop
RDH Auditorium

As always, thanks to our stakeholders for your ongoing support, it is very much appreciated.