

2011 ADIPS Annual Scientific Meeting - Brisbane

There was extensive discussion at ADIPS about the proposed new diagnostic criteria for gestational diabetes, and in particular about the proposed new category of overt diabetes in pregnancy. Tang Wong (Bankstown, Australia) presented data from a retrospective audit evaluating the frequency of abnormal glucose tolerance and type 2 diabetes post-partum in women with overt diabetes in pregnancy compared with non-overt gestational diabetes. They found that women with overt diabetes in pregnancy had a 21% risk of type 2 diabetes on their post-partum glucose tolerance test compared with just 2.3% of women with non-overt GDM (OR 11.2). Overt diabetes in pregnancy was associated with a significantly higher risk of persistent dysglycaemia, but was not synonymous with type 2 diabetes as 40% of these women actually had normal glucose tolerance post-partum.

Glynis Ross (Camperdown, Australia) shared the results of a randomised controlled trial comparing the use of insulin detemir and insulin aspart in pregnant women with type 1 diabetes mellitus. In the insulin detemir group there was a significantly lower fasting plasma glucose in late pregnancy, and this was not associated with any significant difference between groups in hypoglycaemic events. There was no statistically significant difference in HbA1c between groups.

There was a significant focus on maternal obesity throughout the conference and Leonie Callaway (Brisbane, Australia) gave us an insight into some of the determinants of body fat in infants. Gestational diabetes is well known to increase risk of obesity in offspring, but this Brisbane group is the first to look at how the determinants of body fat differ depending on the fetal sex. They found that maternal fasting glucose in the third trimester was the major determinant of adiposity in male infants, but that in female infants maternal pre-pregnancy BMI was the primary predictive factor. This raises the suggestion that in the future the intensity of glucose control and other treatment strategies may be influenced by fetal sex. Dr Callaway encouraged other groups with large datasets to analyse their data on infant adiposity to assess for an impact of fetal sex.

Report by Lisa Hayes

The first hour of the ADIPS scientific meeting may have taught some of us more about lipids than did the entirety of our medical school biochemistry! Dilys Freeman gave a beautifully concise and coherent overview of her work on adipose tissue function in pregnancy – interesting and easily understood. Jane Karpavicius interrupted our postprandial sedation after lunch with a quiz on our carbohydrate counting knowledge, or lack thereof... Certainly the delicious meals on offer for the rest of the conference lost some of their lustre! From then on, one could spot several registrants distracted by their freshly downloaded “Calorie King” iPhone app from time to time, lamenting over that extra brownie at afternoon tea. Later in the afternoon, Aidan McElduff scared us about high dose folic acid and a theoretical risk of malignancy, and Janet Rowan tried to reassure us that the new units for HbA1c won’t be such a harrowing change.

For the physicians in the room who had not seen inside an abdomen for several years, George Hopkins' summary of bariatric surgery in pregnancy served as an enthralling wake-up call first thing on Saturday morning. Susan de Jersey followed by educating us on some very useful practical aspects of nutritional supplements in these patients. David Ellwood gave a sobering reminder of the significant modifiable risk factors for stillbirth in first world countries (with obesity yet again rearing its ugly head), before Dilys Freeman returned to lighten the mood with her enthusiasm for all things biochemical in a discussion about predicting early pregnancy success. Updates on renal disease and hypertension drew the meeting to a close, and capped off a superbly diverse programme for 2011.

Report by Dr Elise Gilbertson