

DIABETES IN PREGNANCY SYNTHESIS

Research Gaps from Cochrane Reviews (Cochrane Library Issue 3, 2007)

The faces indicate the direction of findings in each review:

- ☺ **Likely to be effective**
- ☹ **Both benefits and risks**
- ❓ **Uncertain or limited effect**
- ☹ **Likely to be ineffective or potentially harmful**

Important research implications are more likely to arise from reviews with uncertain findings or where the benefits and risks are mixed

- ❓ **Continuous subcutaneous insulin infusion versus multiple daily injections of insulin for pregnant women with diabetes (Farrar 2007)**
 - Need a large multi-centre randomised controlled trial that is robustly administered and adequately powered to investigate the efficacy of continuous subcutaneous insulin infusion as opposed to multiple daily injections in those women with type 1, type 2 and gestational diabetes who require insulin therapy
 - Need to include outcomes such as perinatal mortality, fetal anomaly, hypoglycaemic/hyperglycaemic episodes requiring intervention, admission and length of stay on special care baby unit due to hypoglycaemia in any future trials.
- ❓ **Dietary advice in pregnancy for preventing gestational diabetes mellitus (Tieu 2007)**
 - Cochrane protocol
 - Cochrane review in progress
- ❓ **Elective delivery compared with expectant management in term diabetic pregnant women (Boulvain 2001)**
 - Need further large RCTs to evaluate elective delivery in diabetic pregnant women, assessing anxiety (due to unexpected fetal distress) and maternal inconvenience because of surveillance and treatment with insulin
- ❓ **Exercise for diabetic pregnant women (Ceysens 2006)**

Need further large RCTs involving women with gestational diabetes, and possibly type 2 diabetes
- ❓ **Treatments for gestational diabetes and impaired glucose tolerance in pregnancy (Tuffnell 2003)**
 - Need large RCTs to determine the perinatal benefit of monitoring and treating women with abnormalities of glucose tolerance during pregnancy
 - Need consistent definitions for the diagnosis of gestational diabetes and impaired glucose tolerance in pregnancy
 - Need a better understanding of the association between increased birth weight and glucose values

REFERENCES

Boulvain M, Stan C, Irion O. Elective delivery in diabetic pregnant women *Cochrane Database of Systematic Reviews* 2001 Issue 2

Ceysens G, Rouiller D, Boulvain M. Exercise for diabetic pregnant women *Cochrane Database of Systematic Reviews* 2006 Issue 3

Farrar D, Tuffnell DJ, West J. Continuous subcutaneous insulin infusion versus multiple daily injections of insulin for pregnant women with diabetes. *Cochrane Database of Systematic Reviews* 2007, Issue 3

Tieu J, Crowther CA, Middleton P. Dietary advice in pregnancy for preventing gestational diabetes mellitus. (Protocol) *Cochrane Database of Systematic Reviews* 2007, Issue 3

Tuffnell DJ, West J, Walkinshaw SA. Treatments for gestational diabetes and impaired glucose tolerance in pregnancy. *Cochrane Database of Systematic Reviews* 2003, Issue 3