Basal insulin analogues in diabetic pregnancy: a literature review and baseline results of a randomised, controlled trial in type 1 diabetes - DTU Orbit (04/11/2019)

As basal insulin analogues are being used off-label, there is a need to evaluate their safety (maternal hypoglycaemia and fetal and perinatal outcomes) and efficacy [haemoglobin A$_{1c}$ (HbA$_{1c}$), fasting plasma glucose, and maternal weight gain]. The aim of this review is to provide an overview of the current literature concerning basal insulin analogue use in diabetic pregnancy, and to present the design and preliminary, non-validated baseline characteristics of a currently ongoing randomized, controlled, open-label, multicentre, multinational trial comparing insulin detemir with neutral protamine hagedorn insulin, both with insulin aspart, in women with type 1 diabetes planning a pregnancy (n = 306) or are already pregnant (n = 164). Inclusion criteria include type 1 diabetes > 12 months’ duration; screening HbA$_{1c}$ \(\leq 9.0\%\) (women recruited prepregnancy), or pregnant with gestational age 8–12 weeks and HbA$_{1c}$ \(\leq 8.0\%\) at randomization. At confirmation of pregnancy all subjects must have HbA$_{1c}$ \(\leq 8.0\%\). Exclusion criteria include impaired hepatic function, cardiac problems, and uncontrolled hypertension. Subjects are randomized to either insulin detemir or neutral protamine hagedorn insulin, both with prandial insulin aspart. The results are expected mid-2011 with full publications expected later this year. Baseline characteristics show that basal insulin analogues are already frequently used in pregnant women with type 1 diabetes. This study will hopefully elucidate the safety and efficacy of the basal insulin analogue detemir in diabetic pregnancy. Copyright © 2011 John Wiley & Sons, Ltd.

General information
Publication status: Published
Organisations: Sansum Diabetes Research Institute, Royal Victoria Hospital, Novo Nordisk A/S, Tel Aviv University, Copenhagen University Hospital
Pages: 543-551
Publication date: 2011
Peer-reviewed: Yes

Publication information
Journal: Diabetes - Metabolism: Research and Reviews (Print Edition)
Volume: 27
Issue number: 6
ISSN (Print): 1520-7552
Ratings:
BFI (2011): BFI-level 1
Scopus rating (2011): CiteScore 3.48 SJR 1.327 SNIP 1.233
Web of Science (2011): Impact factor 3.373
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
Original language: English
DOIs: 10.1002/dmrr.1213
Source: dtu
Source ID: n:oai:DTIC-ART:wiley/309475403::31335
Research output: Contribution to journal › Journal article – Annual report year: 2011 › Research › peer-review