



# Insulin degludec and pregnancy: cases report in type 1 diabetic women



E. Gamarra, G. Grassi

SCDU Endocrinologia, Diabetologia e Metabolismo  
AOU Città della Salute e della Scienza di Torino

## Introduction

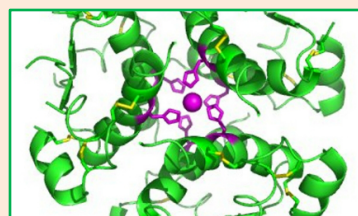
As known, good metabolic control during pregnancy in diabetic patients is extremely important to reduce the risk of maternal/fetal complications.

Insulin analogues currently available help to achieve glycaemic targets, but not all the molecules are recommended yet. Here we report two cases of insulin degludec use during pregnancy in type 1 diabetic (T1DM) patients.

## Results

Both patients had good metabolic control at conception (HbA1c 7.4% and 6.3%) and during pregnancy (HbA1c 6% and 5.8% at delivery).

Basal requirement was reduced in the first trimester and slightly increased it in the last trimester (from 24 to 20 to 26 UI/ die in the first patient and from 22 to 15 to 18 UI/die in the second one).



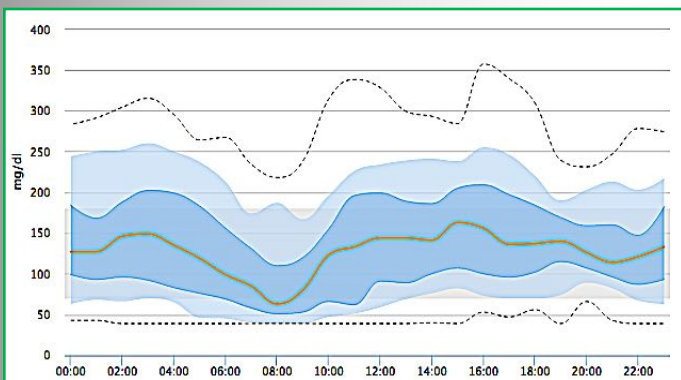
## Materials and Methods

We followed two patients, T.S. and C.E., 31 and 28 years old, BMI 21.5 and 20.6 kg/m<sup>2</sup>. They suffered from non-complicated T1DM since 1995/1997 and switched before conception from glargine to degludec (24 and 22 UI/die, 0.44 and 0.39 UI/Kg) for poor glycaemic control.

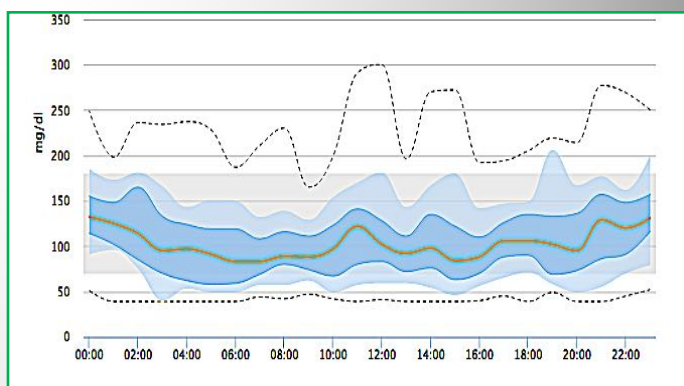
At meals the two women were treated with lyspro doses according to carbo-counting. The only concomitant medication was L-thyroxine (for primary autoimmune hypothyroidism).

Lyspro doses constantly augmented in the first patient (+32%) while decreased in the second woman (-25%), especially at breakfast.

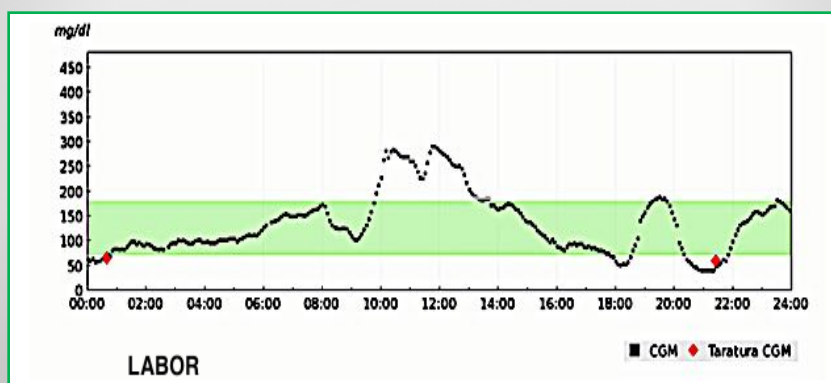
Both patients had spontaneous delivery (at 38 and 38+2 weeks) and birth weights were 3340 and 3280 gr. No major hypoglycemia neither maternal/neonatal complications were reported.



T.S. – First trimester – Mean BG 136 mg/dl; SD 64 md/dl



C.E. – Third trimester – Mean BG 109 mg/dl; SD 45 md/dl



C.E. – Delivery at 38+2 wks – Neonatal weight 3280 gr

## Conclusions

In the two described cases of T1DM insulin degludec has been an effective and safe option to optimize glycaemic control during pregnancy. More data are needed to establish if it can be routinely recommended for diabetes treatment during pregnancy