# CASE STUDY 1 CGM WITHOUT LGS NOCTURNAL HYPOGLYCAEMIA POST EXERCISE



## CASE STUDY 1 CGM WITHOUT LGS NOCTURNAL HYPOGLYCAEMIA POST EXERCISE

#### Patient information:

- 28yr old male
- Type 1 diabetes for 12 years
- Pump therapy for 6 years
- HbA1c struggles to get under 8%
- Work nurse on regular day shifts
- Exercise running & gym
- Injury 12 weeks with no exercise has resulted in frequent overnight hypos
- Encouraged to trust pump settings
- Often makes reactive decisions

# CASE STUDY 1 CGM WITHOUT LGS PRE MODIFICATION



#### The areas of concern

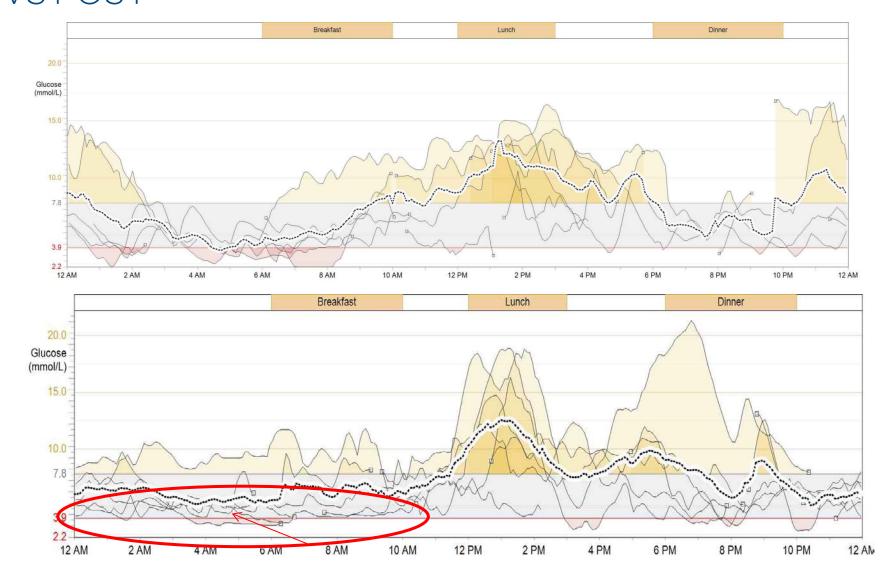
This patient frequently attends the gym in the evenings. During exercise, he usually has good control, however at times experiences lows. After eating to correct this he often has hyperglycaemia. However, the primary area of concern is the nocturnal hypoglycaemia around 8 hours post exercise. This is what should be corrected immediately and should be acted on first. There are other areas which will need attention such as lunch time post prandial hyperglycaemia.

## CASE STUDY 1 CGM WITHOUT LGS SUGGESTED MODIFICATIONS

- For the dinner meal bolus subtract 25% (not the previous 50%)
- Set temp basal 4 hours at bed time to 75% or around 8pm if not wanting a small 10-15gms snack before bed
- Strengthen the basal throughout the day
- Trust the pump's advice whilst trying to establish more accurate settings
- Use CGM to learn to trust current pump settings previously there were many overrides greater than 15% (indicating a reactive response to levels)

Despite the occasional hyperglycaemia trend post dinner meals, the most obvious change to be made was to reduce the dinner meal bolus in order to counteract the nocturnal hypoglycaemia post exercise. Then, strengthen the basal through the day to begin addressing the lunch time hyperglycaemia.

## CASE STUDY 1 CGM WITHOUT LGS PRE VS POST



The changes made have greatly decreased the severity of nocturnal hypoglycaemia. Plus, the overall average dotted line is much flatter than pre-modifications. There is still work to be done but this was a great starting point.

### **CASE STUDY 1 CGM WITHOUT LGS**

This case study relates to accounts of each individual's response to the treatment. Each individual's response does not provide any indication, guide, warranty or guarantee as to the response other persons may have to the treatment. The response other persons have to the treatment could be different. 2385-102015