

# Off label use of CGM in a pediatric patient with type 1 Diabetes Mellitus under the age of 2



Liliana Burdea MD, Sylvia Robinson MD, Stelios Mantis MD  
RUSH University Children's Hospital

## ◆ INTRODUCTION

Continuous Glucose Monitoring (CGM) is an asset for patients with type 1 DM. The Dexcom G6 is FDA approved for use in patients 24 months and older. This CGM does not require any calibrations or point of care interventions and lasts up to 10 days when inserted into the subcutaneous tissue.

We present a case of a 17 month-old patient started on CGM (Dexcom G6), with subsequent improvement in glucose variability and continued excellent glycemic control (Hga1C <7.5%).

## ◆ CASE

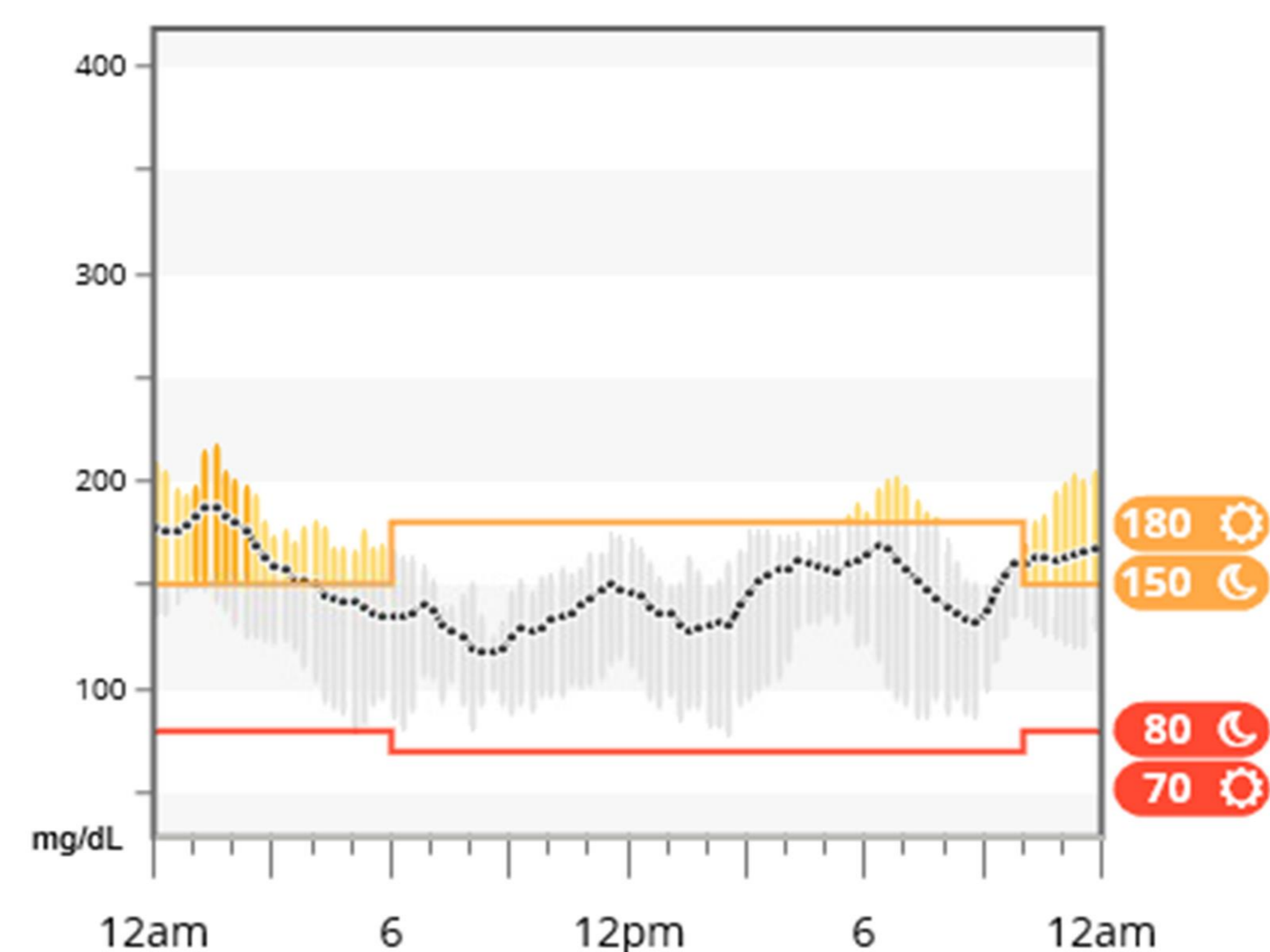
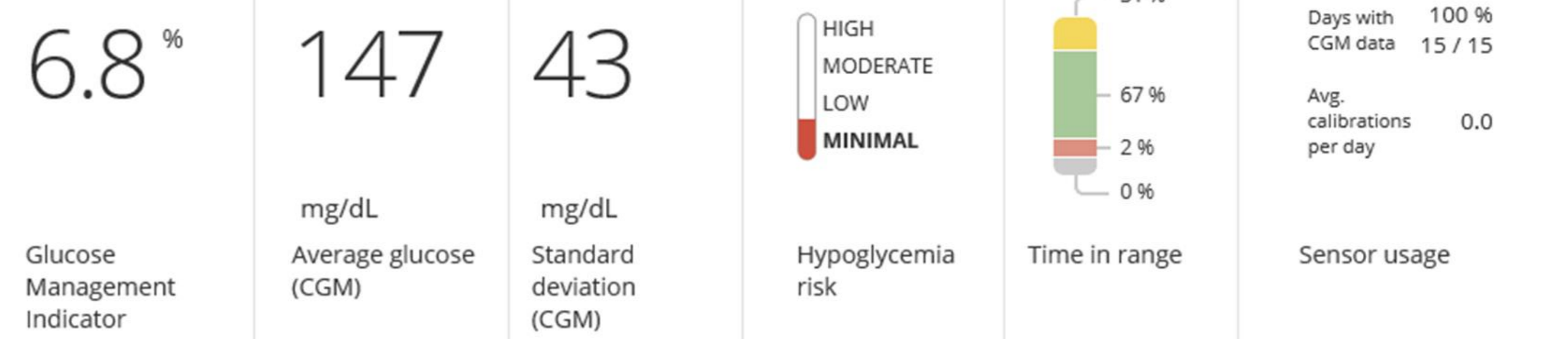
Our patient is a 17-month-old male with type 1 Diabetes Mellitus, diagnosed at age 14 months. For 3 months he was managed with insulin injections and point of care glucose checks. His parents were struggling to check his blood sugar levels 4-8 times a day. His Hga1C was under control (less than 7.5 %), but parents were not happy with so many point of care interventions. Despite CGM not being FDA approved in children younger than 24 months of age, we decided to discuss off label use with the family in hopes of decreasing the number of blood sugar levels obtained via glucometer.

All information regarding the Dexcom G6 was presented to parents (including risks/ benefits) and they were eager to move forward in order to avoid a point of care interventions. Informed consent was obtained prior to the transition to CGM.

On follow up visits, parents were satisfied with the CGM and the fact that they do not have to struggle checking point of care glucoses. Just as importantly they were able to avoid hypo or hyperglycemic events, prior to their occurrence. His Hga1C remained less than 7.5 %. The patient had no Emergency Room visits, no hospitalizations and a better quality of life for him and his family.

## ◆ GRAPHS (2 weeks range)

### Statistics for this date range



## ◆ CONCLUSION

CGM Dexcom G6 is a very reliable device and its use can be beneficial for younger patients and their families.

Our patient's data showed that he is more time in the range, with less hypoglycemic and hyperglycemic episodes. More importantly, quality of life and patient/family satisfaction was improved dramatically.

## ◆ REFERENCES

1. David Rodbard, Continuous Glucose Monitoring: A Review of Recent Studies Demonstrating Improved Glycemic Outcomes, DIABETES TECHNOLOGY & THERAPEUTICS Volume 19, Supplement 3, 2017, DOI: 10.1089/dia.2017.0035
2. John B. Welsh, Role of Continuous Glucose Monitoring in Insulin-Requiring Patients with Diabetes, DIABETES TECHNOLOGY & THERAPEUTICS Volume 20, Supplement 2, 2018, DOI: 10.1089/dia.2018.0100

## ◆ DISCLOSURES

Funding source: No funding was secured for this study. Disclosures: None. Conflict of interest: None