

Individualize Treatment of Inpatient Hyperglycemia

New data will fuel debate about sliding scale insulin for inpatient hyperglycemia...in patients withOUT type 1 diabetes.

Guidelines continue to recommend basal or basal-bolus insulin...instead of sliding scale...to reduce HYPERglycemia. But this is driven by limited evidence.

And many clinicians haven't embraced basal-bolus...since it can increase HYPOglycemia risk and is labor intensive. Now two studies in non-ICU patients add real-world perspective.

Both generally support a role for sliding scale alone, especially when admission glucose is under 180 mg/dL. And one suggests that basal-bolus may not be a preferred regimen.

These data are limited. But they reinforce current practice of individualizing hyperglycemia treatment...based on the patient's current blood glucose, home management, hypoglycemia risk, etc.

Keep aiming for a blood glucose under 180 mg/dL for most floor and ICU patients...while avoiding HYPOglycemia.

But use a higher goal in some cases...such as under 250 mg/dL for an asymptomatic floor patient with severe kidney disease.

Start with sliding scale for many non-ICU patients, especially if they're well managed on 1 or 2 non-insulin meds at home...or don't have diabetes.

If hyperglycemia persists for 24 to 48 hours, add a once-daily basal insulin dose...such as 0.15 to 0.25 units/kg.

Or consider starting with basal plus sliding scale for patients well managed at home on insulin or several non-insulin meds.

Save basal-bolus plus sliding scale for patients with good enteral intake who use this regimen at home...or have uncontrolled glucose on higher insulin doses, such as more than 0.6 units/kg/day.

Ensure your protocol provides clear instructions for basal-bolus plus sliding scale and review steps with nursing...to avoid errors.

Before discharge, generally restart home diabetes meds...stop inpatient insulin regimens...and document the plan. Also verify follow-up within 1 to 2 weeks if diabetes regimens are changed.

Get our resource, *Hyperglycemia in the Hospital*, for more answers, including when to hold and re-titrate non-insulin home meds.

And use our *Diabetes Resource Hub* to find additional practice tools.

Key References:

- Ann Intern Med. 2021 Aug;174(8):HO2-HO4
- J Hosp Med. 2021 Aug;16(8):462-468
- J Endocr Soc. 2021 Jun 16;5(8):bvab101
- J Endocr Soc. 2021 Aug 18;5(10):bvab134
- Diabetes Care. 2022 Jan 1;45(Suppl 1):S244-S253

Hospital Pharmacist's Letter. May 2022, No. 380518

Cite this document as follows: Article, Individualize Treatment of Inpatient Hyperglycemia, Hospital Pharmacist's Letter, May 2022

The content of this article is provided for educational and informational purposes only, and is not a substitute for the advice, opinion or diagnosis of a trained medical professional. If your organization is interested in an enterprise subscription, email sales@trchealthcare.com.

© 2022 Therapeutic Research Center (TRC). TRC and Hospital Pharmacist's Letter and the associated logo(s) are trademarks of Therapeutic Research Center. All Rights Reserved. | 3120 W. March Lane, Stockton, CA, 95219 | (209) 472-2240