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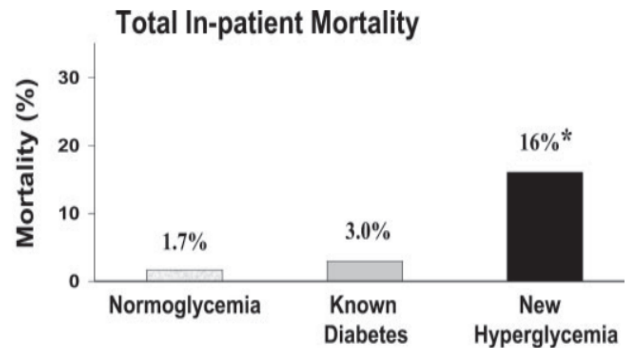
Inpatient Fundamentals



Context: Inpatients have volatile medications, nutritional intake, and physiologic stress that can all alter glucose metabolism.

Current: Inpatient hyperglycemia correlates with inpatient mortality.[1] Goal inpatient glucose is 140 - 180.

Cutting Edge: If ≥2 readings are >180 in 24 hours, then diabetes medications need to be adjusted.

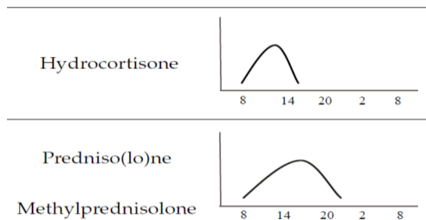
Oral Diabetic Medications

Context: All oral antihyperglycemic medications have traditionally been held during inpatient admission.

Current: Basal-bolus insulin is still often the optimal initial strategy during hospitalization.[2] Sliding scale insulin monotherapy is unlikely to be effective.[3] It is probably safe to introduce non-insulin therapies prior to discharge after stabilization.

Cutting Edge: Sulfonylureas and SGLT-2 inhibitors are best held throughout. Metformin,[4] pioglitazone, and possibly DPP-4 inhibitors can sometimes be safely continued.

Steroid-Induced Hyperglycemia



Context: Steroids lead to predictable peaks and troughs in blood glucose.

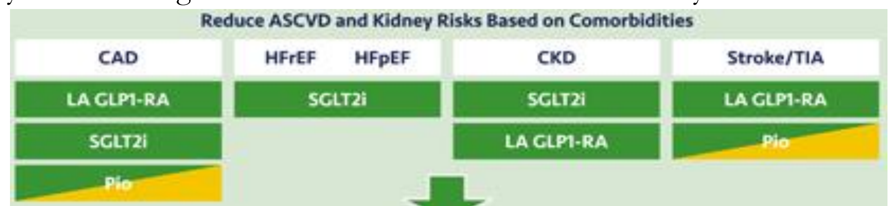
Current: Matching insulin to steroids may help. Hydrocortisone may respond well to regular or NPH insulin, while prednisone and methylprednisolone track well with NPH or detemir.[5]

Cutting edge: A1C on admission can help guide discharge therapy. Specifically, A1C 7-10 warrants outpatient medication adjustment and A1C >10 warrants addition of outpatient insulin.

Classes of Medications

Context: Antihyperglycemic medications have traditionally been indicated only for diabetes.

Current: Antihyperglycemics are rapidly accumulating indications for cardiovascular and kidney disease.[6] Specifically:
- SGLT-2 inhibitors for CAD, HF, & stroke/TIA
- GLP1-RAs for CAD, stroke/TIA, & CKD



Cutting Edge: Hospitalists are increasingly responsible for starting these medications on or before discharge and embracing their role in chronic disease management.

References:
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6. Handelsman, et al. Multispecialty Practice Recommendations for the management of diabetes, cardiorenal, and metabolic diseases. J Diabetes Complications. 2022;36(2):108