Perioperative management of the Diabetic Patient

Increased cortisol and catecholamines reduce insulin sensitivity, while heightened sympathetic activity reduces insulin secretion while simultaneously increasing growth hormone and glucagon secretion

There currently exists no evidence-based guideline dictating when to cancel surgery due to hyperglycemia. As a rule, elective surgery should not be performed on patients in a compromised metabolic state (DKA, HHS, etc.). Although no strict standard for surgical cancellation has been determined, ***HHHN recommends postponing surgery if glucose is greater than 400 mg/dL***

Oral medications

-Patients should continue oral medications until morning of surgery including both oral and GLP-1 analogs; ***the morning of surgery*** both ***oral medications and GLP-1 analogs should be HELD***

Insulin

-***For early AM procedures*** where only breakfast may be delayed, ***basal insulin should be reduced by 20%***

-***For procedures where the patient will miss breakfast and also possibly lunch***

> -***Omit short acting AM insulin morning of surgery***
>
> -For patients taking ***basal AND prandial (short-acting) insulin in the morning ONLY***, calculate their usual total morning dose of insulin (basal+prandial) and ***administer 50% of basal insulin***
>
> -***For patients taking basal AND prandial insulin two or more times a day***, ***give 50% of the total morning dose (basal+prandial) of long-acting insulin***
>
> -Patients on continuous insulin infusion (insulin pump) may continue with their usual basal infusion rate, assuming the catheter and pump can remain safely in place during procedure (confer with endocrinologist)
>
> -In a patient with type 1 DM (less often type 2) who has frequent hypoglycemia or FBS level in lower end of normal range, consider reducing night time long or intermediate acting insulin by 20% on the night prior to surgery to prevent hypoglycemia; ensure you have the correct basal rate of insulin (0.2 to 0.3 U/kg/day of long acting insulin)

-For long and complex procedures, IV insulin will be required which can be managed by the anesthesiology team

Post-operative management of the diabetic patient

> -Metformin should not be restarted in patients with renal insufficiency, significant hepatic impairment, or congestive heart failure.
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> -Sulfonylureas stimulate insulin secretion and may cause hypoglycemia; they should be started only after eating has been well established. A step-up approach can be used for patients on high dose sulfonylureas, starting at low doses and adjusting them until the usual dose is reached.
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> -Thiazolidinediones should not be used if patients develop congestive heart failure or problematic fluid retention, or if there are any liver function abnormalities.