



Under the weather? Forecasting recovery: Managing sick days with diabetes

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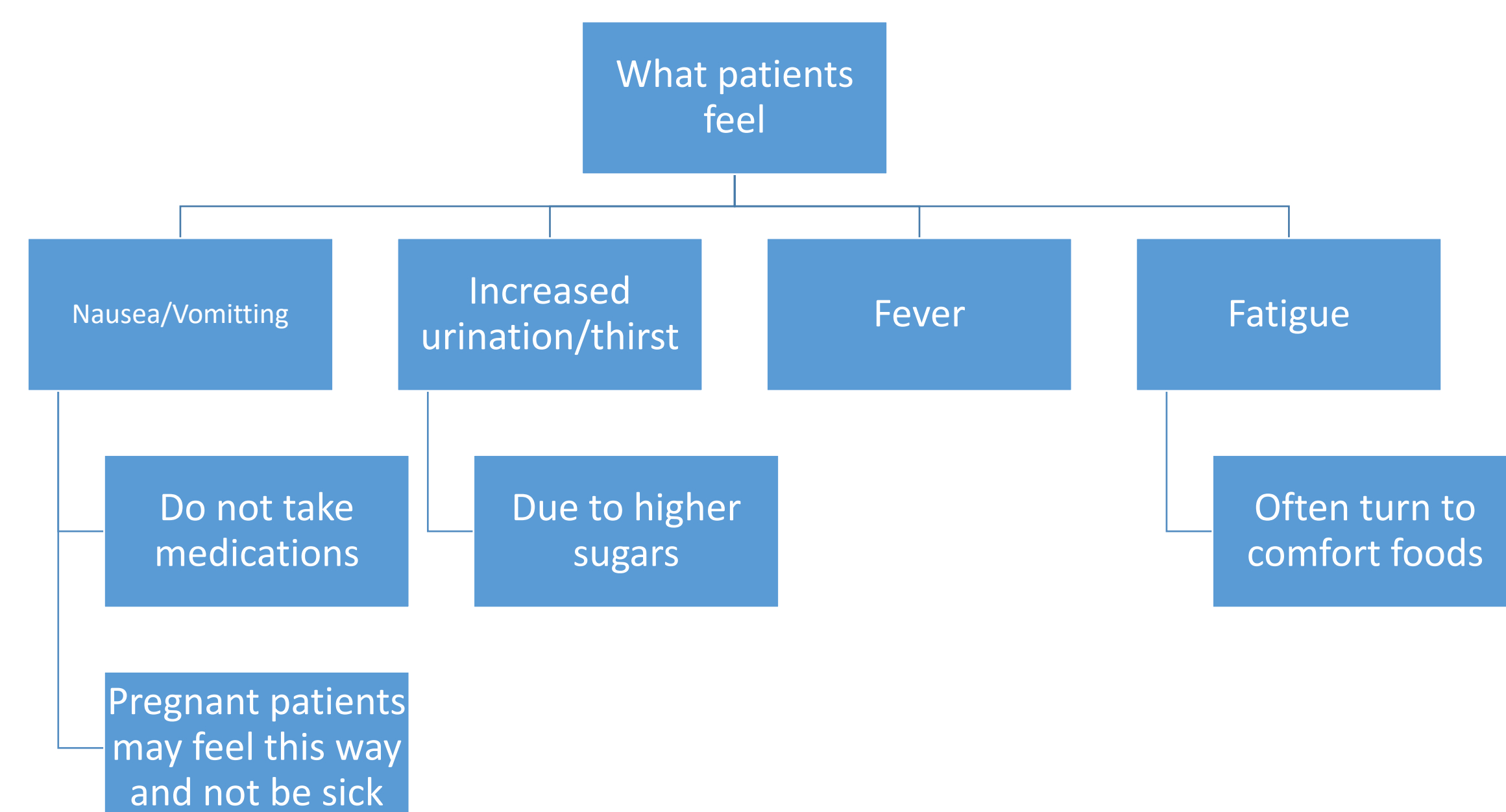


Background

Patients with diabetes are more at risk for severe complications such as diabetic ketoacidosis (DKA) when they are sick. Our bodies natural response to illness and how patients feel are two integral pieces to the puzzle practitioners must learn how to fit together.

Pathophysiology^{1,2}

- Body releases stress hormones
 - Cortisol, glucagon, growth hormone, epinephrine/norepinephrine
 - Signal liver to make more ketones and glucose
- Sugar levels increase
 - Pancreas signaled to make more insulin
- Patients with diabetes are less able to make the insulin needed to keep up with the increased glucose



References

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Medications/Results

The medications recommended and/or given to patients for an illness play a large part in making sure their sugars remain at goal.

- Continue to take all medications as prescribed even if NOT eating
- Check sugars several times per day³
 - If on insulin check at least 3-4 times per day
 - If morning readings >150 consistently, increase long/intermediate acting morning insulin by 10-20%
 - If on sulfonylurea, increase to twice daily sugar checks
- DDP4 inhibitors and GLP1 receptor agonists require no extra monitoring as mechanism of action based on glucose levels in body³
- SGLT2 inhibitors may be held if risk of dehydration as have a diuretic effect and may worsen dehydration³

Inpatient example

- For patients on steroids, can give NPH at same time as steroid in addition to regular basal/bolus insulin. Similar peak and duration of action to steroid^{4,5}
 - Prednisone 10-40mg/day 0.05 - 0.1 units/kg/day
 - Prednisone >40mg /day 0.15 – 0.2 units/kg/day
- When tapering glucocorticoids, taper insulin in similar fashion

Appropriate Recommendations

- Many liquid products contain sugary syrups to make them taste better which in turn increase blood sugar levels¹
- Tablets and gelcaps have little to no alcohol/carbohydrates
- Look to target the symptoms to avoid amount of sugar taken with each medication
- Appropriate options include:
 - Chlorphaniramine tablets
 - Guaifenesin tablets
 - Dextromethorphan tablets
 - Sodium Chloride or oxymetazoline nasal sprays for congestion

Beyond Medications

- **Hydration¹**
 - 8oz fluid per hour with 8oz of sodium-rich fluids every 3rd hour
- **Food and Beverages¹**
 - 150-200g of carbohydrates daily
 - Soft foods/liquids as tolerated
- **Checking blood glucose¹**
 - Check sugars every 2-4 hours and keep a log
- **Checking ketones¹**
 - Especially important for patients with type 1 diabetes
- **Contacting healthcare provider¹**
 - Call if:
 - 1+ episode of vomiting
 - 5+ episodes of diarrhea
 - Blood sugars > 300 x2

Emergency Preparedness⁶

- Disaster kit
 - Food
 - Water
 - Medications
 - First Aid Kit
 - Flashlight
- Place all medication information in a plastic bag including copies of ID, make/model of insulin pump/supplies, and MD/pharmacy name/number
- Have enough diabetes supplies for 2 weeks



Disclosures

The author of this presentation has nothing to disclose concerning possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this presentation.