

## **Case Study 2: Patient G.C.**

You admit G.C., 48 yr. old obese Hispanic male with Type 2 Diabetes on your medical floor with left heel ulceration. He completed antibiotics and Prednisone for a severe respiratory infection 1 week ago. He is a soft-spoken unemployed cook. He conveys that he lives with Mama (she is present speaks no English). He is unmarried and has no children. He appears depressed. You scan his Labs:

Blood glucose 275  
BUN 32 – Creatinine 2.5  
Triglycerides, Total Cholesterol 270

He states he was started on 25 units of NPH Insulin when he developed the foot ulcer several weeks ago. He states his PCP said if he does not “straighten out he may end up on dialysis.” You ask him if he maintains a dietary plan and he says; “sometimes.” GC states his doctor told him to try to maintain a blood glucose level of 100-150.

The next day GC received his AM dose of insulin at 0645. Blood glucose check at 11:30 is 138. You note GC ate poorly at breakfast and very little at lunch because he wanted to rest. At 1430 you want to check on GC and are prepared to change the dressing on his foot. When you enter the room, he says he has a headache. You immediately check his blood sugar which is 69.

- What is your immediate plan of direction?

**I would get the patient something sugary and easy to get down quickly, like an orange juice, followed up with something like Peanut Butter (protein) 15 minutes later. I may also start preparing for fluids to be run into this patient, and push drinking as much water soon after the sugars begin to rise to help with possible dehydration. I would then prepare to contact the health care provider to give them an update on the situation, a sliding scale may need to be put in place for this patient.**

- Why did the hypoglycemia occur at 4 PM?

**Patient has not had any insulin since 0645 and has not eaten much of the first two meals of the day. Postprandial hypoglycemia could also be the culprit of this specific hypoglycemic event. With the patient wanting to sleep, snacking is probably also not happening. The NPH (slow acting insulin) effect would also be beginning to decline around this time, worsening the drop-off of sugar levels.**

- What nursing diagnoses are appropriate?

**-Hypoglycemia**

**-Renal issues stemming from history of high blood sugar and evidenced by lab work**

**-Depression, patient has to want to get better, and psychosocial aspects for a lifelong diagnosis are incredibly important for any patient trying to get better.**

- Why does the doctor recommend that GC maintain a higher than normal level?  
**Possibly to account for the slow acting NPH newly prescribed to the patient, the potential risk for a patient just starting to use insulin is high.**
- What could cause GC's blood sugar to elevate?  
**There are of course the common usual suspects of rebound hyperglycemia, or the simple act of eating and drinking too many carbs/not enough protein. In this instance, if the patient lives a similar life-pattern at home (depression and unemployment leave a lot of free time to nap), the danger of binging after not eating all day, and at a time when the morning's NPH is nearing the end of efficacy, could result in a massive spike in blood sugar levels. I would worry about dehydration as well, if the kidneys are not getting flushed enough (possibly evidenced by labs), this could mean that the patient is not getting adequately hydrated and this can influence the blood sugar levels. The patient is not eating much of his meals, and if the patient is sleeping all day, he is not drinking water/fluids, dehydration is a real worry.**
- What barriers does GC have?
  - Cost of care**
  - Psychosocial affect (depression)**
  - Possible lack of education for himself and family, it may be difficult to explain/educate his main family support, Mama, without appropriate translation tools.**
- What are important goals for GC regarding diabetes care?
  - Keeping his sugars where the physician wishes them to be**
  - Getting help for depression, if the patient does not want to get better, they will not**
  - Lifestyle changes such as weight loss and proper schedule for consuming food to prevent a hypo or hyperglycemic event.**
  - The risk of infection is worsened by the DM diagnosis, and the patient will need to take increased steps for avoiding situations where another respiratory infection may happen.**
- What culture or language challenges might GC have?

**This patient may have a culture where it is hard to ask for help when dealing with not only depression, but his general wellbeing when it comes to his DM care. His culture seems to include a matriarchal decision-making/leadership process, and if his Mama cannot be fully educated because of a language barrier, his care may go on the wayside.**

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**I would sincerely hope there would be plenty of Spanish resources, but you can never be 100% sure that this will be the case wherever you practice, and even here in West Texas sometimes there is not a nurse or professionally trained staff member every shift, every day, who will be able to help.**