

## Diabetes Control in Pregnancy - Part II

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Nursing

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### Examination

- When a patient is converted to subcutaneous insulin after being on an insulin infusion, the first step is to determine the patient's C/I ratio (calorie to insulin ratio) for the past 24 hours (when she was on the infusion). To accomplish this, one takes the**
  - total amount of insulin that was infused in the 24-hour time span divided by the total number of calories consumed over the same 24-hour period.
  - total amount of insulin that was infused in the 24-hour time span divided by the total number of calories in the planned ADA diet.
  - total number of calories consumed in the 24-hour time span and compares it to the planned ADA diet.
  - total number of calories in the planned ADA diet divided by the total amount of insulin that was infused over the same 24-hour period.
  - total number of calories consumed in the 24-hour time span divided by the total amount of insulin that was infused over the same 24-hour period.
- When a patient is converted to subcutaneous insulin after being on an insulin infusion, the "daily insulin requirement" is calculated by taking the**
  - total number of calories consumed in the last 24-hour time span and comparing it to the planned ADA diet.
  - total calories in the prescribed ADA diet and dividing that by the C/I ratio.
  - total amount of insulin that was infused in the last 24-hour time span divided by the total number of calories in the planned ADA diet.
  - total amount of insulin that was infused in the last 24-hour time span divided by the total amount of insulin that is estimated for the next 24 hours.
  - C/I ratio and dividing it by the total calories in the prescribed ADA diet.
- For subcutaneous insulin therapy, \_\_\_\_\_ of the "daily insulin requirement" is the total morning dose that will consist of NPH and regular insulin.**
  - 33%
  - 34%
  - 16%
  - 67%
  - 50%
- For subcutaneous insulin therapy, \_\_\_\_\_ of the total morning dose consists of regular insulin.**
  - 33%
  - 34%
  - 16%
  - 67%
  - 50%
- A patient is being converted from an intravenous insulin infusion to a subcutaneous insulin regimen. Her C/I ratio for the past 24 hours was 48. The plan for the patient is to be placed on a 2400 calorie ADA diet. Thus her total daily insulin requirement would be about**
  - 25 units
  - 50 units
  - 75 units
  - 100 units
  - 98 units

6. The total daily insulin requirement of a pregnant patient is calculated to be 90 units. The amount of this that would be given as regular insulin at dinnertime would be approximately
- 60 units
  - 40 units
  - 15 units
  - 20 units
  - 30 units
7. The best success (for patient compliance) regarding the diet that a patient follows is
- when the patient has some control over what the diet management entails
  - when the nurse creates the diet plan that the patient must follow
  - when the pharmacist creates the diet plan that the patient must follow
  - when the dietician creates the diet plan that the patient must follow
  - when the physician creates the diet plan that the patient must follow
8. Insulin requirements increase during pregnancy because the
- diabetes will progressively become worse
  - type of iron in the prenatal vitamins interferes with the function of insulin
  - metabolic needs of the mother will decrease
  - absorption of carbohydrates increases as the pregnancy progresses
  - placenta metabolizes insulin
9. If a pregnant diabetic patient is well controlled prior to becoming pregnant, it is not uncommon for her total daily insulin requirement to
- quadruple by the time she is in the third trimester
  - triple by the time she is in the third trimester
  - double by the time she is in the third trimester
  - not really change significantly by the time she is in the third trimester
  - actually decrease by the time she is in the third trimester
10. Regarding the three-injection method for a subcutaneous insulin regimen, the morning NPH insulin primarily covers
- the entire day
  - the bedtime snack
  - dinner
  - lunch
  - breakfast
11. Regarding the three-injection method for a subcutaneous insulin regimen, the blood sugar to follow regarding the bedtime NPH insulin is the
- fasting or pre-breakfast blood sugar
  - postprandial value after breakfast or the pre-lunch blood sugar
  - postprandial value after lunch or the pre-dinner blood sugar
  - postprandial value after dinner or the pre-bedtime snack blood sugar
  - mid-day blood sugar value
12. It is important to remember that patients monitor their blood sugar as an outpatient by using a glucometer, which is checking whole blood that is \_\_\_\_\_ than a laboratory plasma value.
- 30% higher
  - 15% higher
  - no different
  - 15% lower
  - 30% lower

13. The following table displays the past 4 days of blood sugars obtained from a pregnant diabetic by glucometer who is using a three-injection insulin scheme. What changes, if any, should be made. (The postprandial values are 2-hour postprandial)

Fasting Value	Postprandial Breakfast	Postprandial Lunch	Postprandial Dinner
91	127	89	106
79	138	100	99
86	136	98	93
83	149	103	101

- a. The regular insulin dose in the morning shot should be increased
  - b. The NPH insulin dose in the morning shot should be increased
  - c. The regular insulin dose at dinner should be increased
  - d. The NPH insulin dose at bedtime should be increased
  - e. No changes should be made
14. If the fasting blood sugar obtained by glucometer is consistently too high for a pregnant diabetic who is using a three-injection insulin scheme, the
- a. regular insulin dose in the morning shot should be increased
  - b. NPH insulin dose in the morning shot should be increased
  - c. regular insulin dose at dinner should be increased
  - d. NPH insulin dose at bedtime should be increased
  - e. insulin dose in every injection should be increased slightly
15. The hyperglycemia that follows an injection of betamethasone may persist for \_\_\_\_\_ after the last injection.
- a. 12 days
  - b. 48 to 96 hours
  - c. 24 to 48 hours
  - d. 12 hours
  - e. 4 hours
16. The increase in blood sugar that may be seen following an injection of terbutaline is usually seen within about
- a. 96 hours
  - b. 48 hours
  - c. 24 hours
  - d. 12 hours
  - e. 4 hours
17. The following drug combination represents the biggest challenge in the management of a pregnant diabetic.
- a. betamethasone and diphenhydramine
  - b. betamethasone and terbutaline
  - c. terbutaline and diphenhydramine
  - d. diphenhydramine and ritodrine
  - e. ritodrine and chlorpheniramine

18. By definition, hypoglycemia is a blood glucose value that (by glucometer) is \_\_\_\_ a level at which most patients will exhibit symptoms.
- a. less than 120 mg/dl
  - b. less than 100 mg/dl
  - c. less than 90 mg/dl
  - d. less than 70 mg/dl
  - e. less than 50 mg/dl
19. Though not absolute, most convulsions / seizures do not occur unless the blood sugar value by glucometer is
- a. less than 10 mg/dl
  - b. less than 25 mg/dl
  - c. less than 50 mg/dl
  - d. less than 70 mg/dl
  - e. less than 90 mg/dl
20. When treating a hypoglycemic reaction, glucagon is usually given
- a. for all reactions
  - b. when the patient requests to be treated
  - c. for severe reactions, seizures, or coma
  - d. when the patient complains of sweating
  - e. when the patient complains of tingling of the lips and tongue

