**PHARMACOLOGY STUDY GUIDE**

**MODULE 5 – Drugs that Affect the Endocrine System**

***Ch. 40 – Antidiabetic Drugs – Insulin and Treatment of Diabetes***

1. What is the difference between Type 1 (IDDM) and Type 2 (NIDDM) diabetes?

2. Why can insulin not be taken orally?

3. What is the normal range for adult blood glucose?

4. Is urine testing used to monitor glucose levels? Why or why not?

5. How does the A1 C differ from a blood glucose reading?

6. What is the onset, peak and duration for regular insulin, insulin lispro, and NPH insulin?

7. What syringes must be used for insulin and why?

8. How many nurses must verify insulin in a hospital setting and why?

9. What is the main adverse reaction of any insulin?

10. What are the S&S of hypoglycemia?

11. What are the S&S of hyperglycemia?

12. In general, how can many drugs affect insulin effectiveness?

13. How does pregnancy affect diabetes management?

14. How does stress affect insulin requirements?

15. When mixing regular or lispro insulins with an intermediate acting insulin like NPH,

which one should be drawn up first?

16. What should the nurse know before giving an injection of insulin?

17. What should the nurse monitor after giving an injection of insulin?

18. What is lipodystrophy and what can the nurse do to prevent it?

19. How should the nurse treat a hypoglycemic reaction?

20. How does glucagon work to raise blood glucose during a hypoglycemic reaction?

21. How can the nurse best help alleviate a patient’s anxiety related to their diabetes?

22. What are important teaching points to cover with a patient and their family related to

diabetes medication and use of a glucometer?

Oral Antidiabetic Drugs

1. Why can these drugs not be used in place of insulin?

2. What are the adverse reactions of oral antidiabetic drugs?

3. How should a hypoglycemic reaction be treated for a patient who is taking acarbose

and why?

4. How does stress play a role in treating NIDDM patients who take oral antidiabetic

drugs?

*Meds to pay attention too:*

*Injectables:*

* Short acting insulin- Regular
* Intermediate insulin- NPH
* Long acting insulin- Glargine
* No combos needed!! (no the onset (when to feed them), the peak (when it’s the highest concentration in the system), and duration (how long it lasts)

Orals:

* Metformin
* Semaglutide

***Ch. 41 Pituitary and Adrenocortical Hormones***

*Posterior Pituitary Hormones - vasopressin*

1. How is this drug different from a diuretic?

2. What are the two main uses?

3. What are the main adverse S&S?

4. What is water intoxication and the S&S?

5. What should the nurse know about the patient before giving vasopressin?

6. What should the nurse monitor after giving this drug?

7. What are important nursing implementations when giving this drug for abdominal

distension?

8. What are important nursing implementations when giving this drug for diabetes insipidus?

9. Why is it important to know the difference between diabetes insipidus and diabetes

mellitus?

10. List the main points to cover with a patient who has diabetes insipidus.

*Anterior Pituitary Hormones – somatropin*

1. What is the main use of this drug?

2. What age group will it benefit?

3. What should be monitored when a patient is taking it?

4. What time of day is this drug given and why?

5. What route is this drug given?

6. What should the parents of the child be instructed on regarding injection?

Anterior Pituitary Hormones – adrenocorticotropic hormone (ACTH)

1. What does ACTH do in the body?

2. What are some uses of ACTH?

*Adrenocortical Hormones – Glucocorticoids*

1. What effect do glucocorticoids have on the immune system?

2. What are some uses of glucocorticoids?

3. What are the main adverse reactions?

4. What affect do glucocorticoids have on blood glucose in diabetic patients?

5. Why should patients who are taking glucocorticoids not have a live vaccine given?

6. Why is it important to not omit a dose of a glucocorticoid?

7. What is the purpose of alternate day therapy? How is it given?

8. Why should the nurse monitor for infections?

9. What S&S may indicate the patient is getting an infection? What are nursing interventions

to prevent this, including patient teaching?

10. What S&S may indicate the patient may have GI bleeding? What are some nursing

interventions?

11. What S&S may indication the patient may be developing excess fluid volume?

*Meds to pay close attention too:*

* Somatropin
* Cortisone
* Dexamethasone
* Prednisone