

MHD II, Small Group Session XIII

Correlative Lecture Objectives

MHD

Define diabetes mellitus.

Explain the significance of:

- a) A random glucose > 200 in the setting of polyuria, polyphagia, and polydipsia
- b) A fasting plasma glucose < 100
- c) A fasting plasma glucose > 100 and < 125
- d) A fasting plasma glucose > 126
- e) A post-prandial glucose > 140 and < 200
- f) HgbA1c measurement

Describe the distinguishing features of diabetes mellitus, type 1 and type 2 in terms of

- a) Etiology and pathogenesis
- b) Role of inheritance and environmental factors
- c) Age and frequency
- d) Clinical and morphologic manifestations
- e) Insulin and glucose levels
- f) Insulin requirements
- g) Tendency to ketosis

List the major complications of diabetes.

Distinguish macrovascular vs microvascular complications of diabetes mellitus

Describe diabetic ketoacidosis in terms of etiology, clinical manifestations, key laboratory findings and complications.

List the classic symptoms of diabetes mellitus

List standards of care for Type 2 diabetes mellitus including

- A. recommended lab testing and frequency
- B. treatment goal for glycemic control
- C. treatment goal for lipid control
- D. treatment goal for blood pressure control

List targets for therapy, lab testing with frequency for type 2 diabetes mellitus

Pharmacology and Therapeutics

Understand the pharmacological differences between the various insulin formulations used in the treatment of diabetes especially their duration of action.

Know which insulin types are used for the control of postprandial glucose levels versus those used for the control of fasting glucose levels.

Understand the difference between a conventional and intensive insulin therapy regimen.

For each of the major oral medications used in the treatment of type 2 diabetes. You should be able to describe their:

- a) Indications and clinical use
- b) Mechanism of action
- c) Time of onset and duration of action
- d) Relative effectiveness at reducing hyperglycemia (HbA1c)
- e) Effects on fasting glucose and postprandial glucose
- f) Major adverse effects including risk of hypoglycemia
- g) Contraindications

Focus on understanding the important differences between the major classes of drugs and the situations where the prescription of one class of drugs is favored over that of another for a particular patient.

Understand when insulin therapy is indicated in the treatment of type 2 diabetes.

Correlative topics in First Aid for USMLE I 2011

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