

Chapter 15 – Diabetes Mellitus Presentation Notes

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- Diabetes mellitus
 - _____ disorder in which the body cannot _____ glucose
 - Usually due to a _____ of _____
- Glucose
 - One of the _____ in the body
 - Along with oxygen, it is a primary fuel for _____.

Defining Diabetes (2 of 2)

- Insulin
 - Hormone produced by the _____
 - Enables _____ to _____ the cells
 - Without _____, cells _____.
- Hormone
 - Chemical substance produced by a _____
 - Has special _____ on other body organs and tissues

Type I Diabetes

- _____ - _____ diabetes
- Patient _____ produce any insulin.
- Insulin injected daily
- Onset usually in _____

Type II Diabetes

- _____ - _____ - _____ diabetes
- Patient produces _____ amounts of _____.
- Disease may be controlled by _____ or _____.

Role of Glucose and Insulin

- _____ is the major source of _____ for the body.
- Constant supply of glucose needed for the _____
- _____ acts as the _____ for glucose to enter cells.

Hyperglycemia

- _____ of _____ causes glucose to _____ in blood in extremely high levels.
- Kidneys excrete glucose.
- This requires a _____ of water.
- Without glucose, body uses _____ for fuel.
- _____ are formed.
- _____ can produce diabetic _____.

Signs and Symptoms of Diabetic Ketoacidosis

- _____
- _____
- _____ respirations
- _____

Blood Glucose Monitors

- Glucometer
- Normal range _____ - _____ mg/dL
- Test strips

Diabetic Emergencies According to Blood Glucose Level

Signs of Diabetic Coma

- _____ respirations
- _____
- "_____ " breath odor
- _____, weak _____
- _____ or slightly _____ blood pressure
- _____ degrees of unresponsiveness

Signs of Insulin Shock

- Normal or _____
- _____, _____ skin
- _____
- Dizziness, _____
- Rapid pulse
- _____ to _____ blood pressure
- _____ mental status
- _____ or _____ behavior

- _____
- Fainting, _____, or coma
- _____ on one side of the body

You are the Provider

- You and your partner are dispatched for a 43-year-old man who is “very sweaty and acting strangely.”
- Police are on scene.
- Patient is rocking back and forth.
- Patient repeatedly says he needs to go home.
- Patient is pale, sweaty, and trembling.
- Should this patient be allowed to refuse treatment?
- What additional resources are indicated for this patient?

Scene Size-up

- _____ remains a priority.
- Beware of used syringes.
- Ensure that needed resources are requested.
- Consider spinal immobilization based on _____.

You are the provider continued

- As you assemble your equipment, your partner tells you the patient is wearing a _____
- The patient is an insulin-dependent diabetic.
- The patient’s glucose level is 45 mg/dL.
- What is your next step?

Initial Assessment

- General impression
 - Does the patient appear _____, _____, or _____?
 - Is the patient apathetic or irritable?
 - Is the patient _____ with the environment appropriately?
- If the patient has an _____, summon ALS immediately.

Airway and Breathing

•Check for _____; treat appropriately.

•Breathing:

–If adequate or patient has an altered mental status, provide oxygen via _____ mask at 10 to 15 L/min.

–If inadequate, ensure ventilations with 100% oxygen.

•A hyperglycemic patient may have:

–Rapid, deep respirations (Kussmaul respirations)

–Sweet, fruity breath odor

Circulation

• _____, _____ skin = diabetic coma

• _____, _____ skin = insulin shock

• _____, _____ pulse = insulin shock

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Transport Decision

• _____ and ability to swallow

•Patients with _____ and impaired ability to swallow should be transported _____.

•Patients who can swallow and maintain own airway may be further evaluated and _____

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Focused History and Physical Exam (1 of 2)

• _____ receive a _____ physical exam.

•Ask patients with known diabetes:

–Do you take _____ or any pills that lower your blood sugar?

–Have you taken your _____ of insulin (or pills) today?

–Have you _____ today?

–Have you had any _____, unusual amount of _____, or _____ today?

Focused History and Physical Exam (2 of 2)

- Patients who have _____ but not taken _____ are more likely to have developed _____.
- Patients who have taken _____ but have not _____ are more likely to be in _____.
- The patient _____ what is wrong.
- Do not _____ that _____ is the cause of the problem.

Focused Physical Exam

- Focus on _____ status and ability to swallow and protect the airway.
- Obtain a _____ score.
- Other signs:
 - _____
 - _____
 - _____
 - _____ breath _____
 - _____ mouth

Baseline Vital Signs

- _____
 - Respirations = _____ to _____
 - Pulse = _____ to _____
 - Skin = _____ and _____
 - Blood pressure = _____
- _____
 - Respirations = _____ and _____
 - Pulse = _____ to _____
 - Skin = _____ and _____
 - Blood pressure = _____

Interventions

- Conscious patient
 - If _____ to _____ without risk of _____, encourage him or her to drink juice or another drink that contains sugar.
 - Or _____ oral _____.

- Unconscious patient

- Will need _____

- When in _____, consult _____

You are the Provider (continued) (1 of 2)

- You help the patient _____ - _____ the entire tube of glucose.

- If the patient is _____, how long should it take for this to begin to raise the _____?

- The patient has gotten _____ and mildly _____. Is this expected?

- He becomes more alert.

- He tells you that he was driving home to eat because he realized that his blood sugar level was dropping.

- After a few minutes, he is _____ and refuses transport.

- You remind him to eat a meal high in _____ as soon as possible.

Detailed Physical Exam

- The patient may have _____ or may have another _____ problem; do not make _____.

- Perform a careful physical exam if time permits.

Ongoing Assessment

- Is the patient's _____ improving?

- Reassess _____.

- If patient deteriorates, provide more _____.

- Relay information to the hospital.

- Carefully _____ your assessment findings.

- Follow _____ for refusals.

Administering Glucose (1 of 3)

- Names:

- Glucose

- Insta-Glucose

- Dose equals one tube

- Glucose should be given to a diabetic patient with a _____ level of consciousness.

- _____ give glucose to a patient with the _____ to _____ or who is _____.

Complications of Diabetes

- _____
- _____
- _____
- _____
- _____
- _____ of the feet and toes
- _____
- _____

Seizures

- Consider _____ as the cause.
- Use appropriate BLS measures for _____ management.
- Provide _____ transport.

Altered Mental Status

- _____ is often caused by complications of diabetes.
- Ensure that _____ is _____.
- Be _____ to _____ and _____.
- Provide _____.

Alcoholism

Relationship to Airway Management

- Patients may _____ their _____, causing them to be unable to _____ their airway.
- Be ready to _____ the _____.
- Place patient in _____ position and have _____ available.