Diabetes

“blood sugar problem”
Definitions
Diabetes

- disease in which there is inadequate insulin produced by the body.
Glucose

- source of energy required by all cells for normal functioning.
Insulin

- hormone secreted by pancreas - it allows cells to use glucose.
Hypoglycemia

- low glucose level
- NORMAL RANGE 80-120
Hyperglycemia

- high glucose level
- NORMAL 80-120
Ways of controlling diabetes

- Diet alone
- Oral medications
- Insulin
Type 1 vs. Type 2

- Type 1 diabetes - juvenile onset
- Type 2 diabetes - adult onset
Type I Diabetes

- Insulin-dependent diabetes
- Patient does not produce any insulin
- Insulin injected daily
- Onset usually in childhood
Type II Diabetes

- Non-insulin-dependent diabetes
- Patient produces inadequate amounts of insulin
- Disease may be controlled by diet or oral hypoglycemics
Hyperglycemia

- Lack of insulin causes glucose to build-up in blood
- Kidneys excrete glucose
- This requires a large amount of water
  - Polyuria, polydypsia, polyphagia
- Without glucose, body uses fat for fuel
- Ketones are byproduct of fat metabolism
- diabetic ketoacidosis
Signs and Symptoms of Diabetic Ketoacidosis

- Vomiting
- Abdominal pain
- Kussmaul respirations
- Unconsciousness
Diabetic Coma (Hyperglycemia)
Signs of Diabetic Coma

- Slow onset of ALOC
- Dehydration
- Kussmaul respirations
- “Fruity” breath odor
Insulin Shock (Hypoglycemia)
Signs of Insulin Shock

- Rapid onset ALOC
- Pale, cool, diaphoretic
- Dizziness, headache
- Rapid pulse
- Fainting, seizure, or coma
Diabetes and Alcohol Abuse

- Patients may appear intoxicated
- Suspect hypoglycemia with any altered mental status
- Be alert to the similarity in symptoms
Questions for the Diabetic

- take insulin or hypoglycemics?
- taken your usual dose today?
- eaten normally today?
- any illness, unusual activity, or stress today?
Treatment

- Treat any ALOC diabetic the same
  - high flow O2 via mask
  - supine or left lateral position
  - administer oral glucose (next slide)
  - **rapid transport** - do not delay for administration of oral glucose
Administering Oral Glucose

- Should be given to a diabetic with decreased LOC
- DO NOT give glucose to a patient with the inability to swallow or unconscious*

**Liquid or Paste**
- can make own liquid (OJ + sugar)
- Use liquid only if they are able to hold and drink on their own
- Paste - see skill instructions
Complications of Diabetes

- Peripheral vascular disease
- Heart disease
- Visual disturbances
- Renal failure
- Stroke
- Ulcers
- Seizures
Common Medications

- Insulin - injections
- Diabeta
- Orinase
- Diabinese
- Glucagon
- plus ...
the end

Break!!