Hyperosmolar Hyperglycemic Non-Ketotic Syndrome (HHNKS)

Overview
HHNKS is a life-threatening state that occurs in Type 2 diabetes. It is the result of very high blood sugars and dehydration. Early treatment is important.

OBJECTIVE: Explain the warning signs and treatments for HHNKS.

What are the causes of HHNKS?
HHNKS can be life-threatening. It must be treated early. It often occurs in people with Type 2 diabetes who have had high blood sugars for a long time. When blood sugar levels are high, the body rids itself of the sugar by passing it through the urine. This results in increased thirst and urination. In addition, dehydration can occur.

What are the warning signs of HHNKS?
- Blood sugars greater than 600mg/dL
- Dry mouth and extreme thirst
- Extreme dehydration
- Altered mental state (coma, confusion)
- High fever

What is HHNKS treated?
Insulin is given to correct high blood sugars. Fluid is given through a vein to re-hydrate the body. Potassium is often given. This helps to restore the normal balance in the blood. Antibiotics are given to treat any infection. HHNKS takes several days to treat. Treatment usually requires hospitalization.

Important things to remember
The best way to prevent HHNKS is to check your blood sugar often. Also, be aware of the warning signs of HHNKS. During illness, check blood sugars more often and drink 8 ounces of fluid every hour.
**How can your doctor help?**

If you are have any of the warning signs of HHNKS, talk to your doctor. He/she can order lab work. If diagnosed with HHNKS, your doctor will begin to treat it right away.

---

### QUESTIONS

1. HHNKS occurs in people with:
   a) Type 1 diabetes
   b) Type 2 diabetes
   c) Gestational diabetes
   d) Heart disease

2. Some causes of HHNKS are:
   a) Illness
   b) High blood sugars
   c) Dehydration
   d) All of the above
   e) None of the above

3. A blood sugar level greater than __________ mg/dL is a sign of HHNKS.

---

### ANSWERS

1. b
2. d
3. 600