

DKA VS. HHS

DEFINITION

DKA:

- Life threatening metabolic derangement of glucose metabolism
- DM1
- Rapid onset

HHS:

- Life threatening metabolic derangement of glucose metabolism
- DM2
- Slow progression

SYMPTOMS

DKA:

- N/V
- Abdominal pain
- Ill-appearing
- Tachycardia
- Fruity breath
- AMS
- Kussmal respirations
- 3 Ps
 - Polyuria, polydipsia, polyphagia

HHS:

- Significant dehydration
- AMS (worse than DKA)
- 3 Ps
 - Polyuria, polydipsia, polyphagia

LAB VALUES

DKA:

- Glucose >250
- +Ketones in urine
- pH <7.3
- Bicarb <5
- Agap >12

HHS:

- Glucose >800
- Serum osmolarity >330
- No ketones
- No acidosis

CAUSES

DKA:

- Infection
- Non-compliance with insulin
- New onset DM

HHS:

- Infection
- Stress
- Non-compliance with medication

IMAGING

DKA/HHS:

- CXR
- CT head
- EKG

MEDICATION MANAGEMENT

DKA:

- **Correct fluid/electrolyte imbalance first
- IVF (NS)
- Insulin drip
- Potassium IV (replace K+ before giving insulin)

HHS:

- IVF (NS)
- Insulin drip

LABS

DKA:

- Labs:
 - POC glucose, CBC, CMP, VBG, UA

HHS:

- Labs:
 - POC glucose, CBC, CMP, VBG, UA, serum osmolarity

COMPLICATIONS

- Cerebral edema
- AKI
- Seizures
- Multiple organ failure
- Coma
- Death
 - **Higher death rate in HHS

Supported References

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