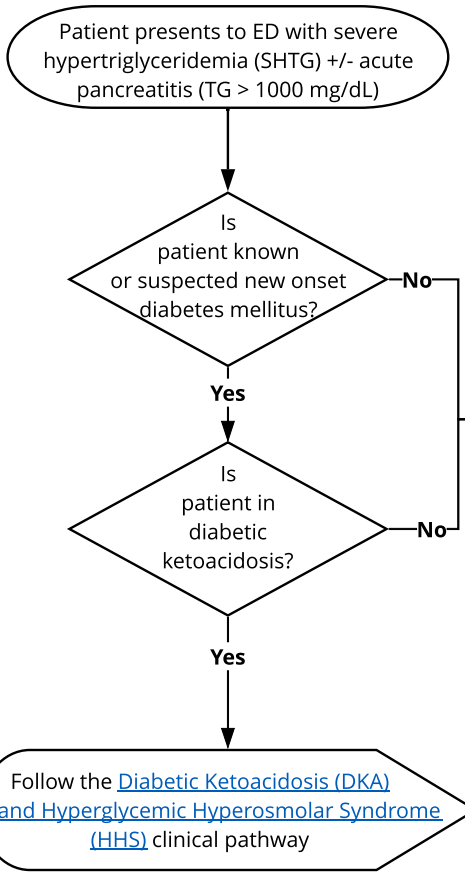
Hypertriglyceridemia - Severe (SHTG): Emergency Department

Children's Mercy KANSAS CITY | Evidence Based Practice

Inclusion Criteria
- SHTG related to:
  - Diabetes and insulin resistance
  - Hematologic-oncologic processes
  - Renal disease
  - TPN use

QR code for mobile view

Goals for SHTG Care Process
- ***Decrease*** TG level with the use of insulin (insulin drip titrated to max of 0.3 unit/kg/hour)
- ***Dextrose*** infused in parallel to prevent hypoglycemia and/or maintain euglycemia
- ***Consider*** IV fluids to maintain hydration



Initial treatment
- ***Complete*** initial labs - BMP, TG level, lipase and CBC
- ***Begin*** Intravenous (IV) fluids: D_{10}NS at 1.5x maintenance rate
- ***Initiate*** insulin drip via IV: 0.1 unit/kg/hr
- ***Make*** patient NPO
- ***Start*** pain control methods
- ***Consult*** Endocrine
- ***Consider*** GI consult if pancreatitis present

Transfer pt to inpatient unit*
**general inpt unit should be 6 Henson, if bed available, or PICU if patient unstable*

Regular Insulin drip:
- Start at 0.1 unit/kg/hr
- As tolerated, increase rate in increments of 0.05 units/kg/hr (increase q6hr)

POC Blood Glucose Checks
- Check 15 minutes after insulin start
- Check 15 minutes after any rate change to insulin drip
- Once patient stabilized at (determine rate & time) check q1hr

IVF bag components:
- Start at 1.5x maintenance rate
- D_{10}NS w/20mEq/L K Acetate & 20mEq/L K Phosphate
- Switch to D_{10}1/2 NS w/ 20 mEq/L K Acetate & 20 mEq/L K Phosphate if chloride gets too high (>115 mmol/L)

Abbreviations:
AP = Acute pancreatitis
SHTG = Severe hypertriglyceridemia
TG = Triglyceride level
TPN = Total parenteral nutrition

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Link to: synopsis and references

Last Updated: 07.16.2025