ENDOCRINE EMERGENCY GUIDELINES

Hypoglycemia

- If low BG and cause unknown, GET CRITICAL SAMPLE PRIOR TO TREATMENT!
- . *Labs tested during hypoglycemia are critical to identifying cause and preventing recurrence*
 - o Serum critical sample
 - BMP Insulin, C-peptide, Cortisol, GH
 - Free fatty acids, B-hydoxybutyrate, Acetoacetate
 - Lactate, Ammonia, Save serum (sulfonylureas), Total and Free carnitine
 - o At any time
- Acylcarnitine profile, serum amino acids,
 - o Urine as quickly after hypoglycemia as possible
- Urine ketones
 - Urine Organic acids
- If suspect hyperinsulinism, glucagon stim test (0.03mg/kg, max 1 mg) and measure lab glucose at 0, 15, and 30 minutes
- Acute Treatment: obtain critical sample and correct hypoglycemia within 10-15 minutes.
- o Glucose gel per eCHAM guidelines We don't have easy access to this reference
 - IV or IO dextrose bolus (D10%, or D25%), followed by continuous infusion of Dextrose IVF and frequent blood sugar checks (q1-2 hrs initially, maybe more frequent)
 - D25% 2-4 ml/kg; D10 5-10 ml/kg (neonates 2 ml/kg D10)
 - IF insulin-mediated, treat with glucagon 0.03 mg/kg up to 1 mg OR 0.5 mg IM <20kg, 1 mg IM >20 kg

Adrenal Insufficiency

- Critical Sample before treatment: cortisol
 - o If suspect primary adrenal insufficiency, include ACTH, renin, aldosterone
 - If suspect CAH, include 170H-progesterone or CAH-6b panel (send-outs)
 - Also check BMP, CBC, U/A
- · Treat while awaiting results
 - o Normal Saline Bolus 20ml/kg
 - Hydrocortisone 50-100 mg/m2 IV bolus (lower end of range if less sick, higher end of range if more sick) followed by 50-65 mg/m2/day, divided q6h
 - If no IV access, SoluCortef IM or Dexamethasone IM
 - SoluCortef 50-65 mg/m² IV/IM short acting
 - At this dose, <u>adequate mineralocorticoid activity</u> to replace moderate doses of oral fludrocortisone (80 mg HC = 0.2 mg fludrocortisone)
 - Dexamethasone 1.5-2 mg/m² IV/IM—long acting
 - · No mineralocorticoid activity
 - Does not cross react with cortisol in lab assay so can use Dex if unable to get cortisol before treatment and then do Cortrosyn stimulation test after treatment