Emergency management of an Addisonian Crisis (acute adrenal insufficiency)

Immediate management:
1. 100 mg hydrocortisone IV or IM stat
   o Then 50 mg hydrocortisone IV QDS or 200 mg/24 hours IVI
2. IV 0.9% normal saline infusion
   o Several litres may be required / 24-48 hours
3. Check the blood glucose and treat hypoglycaemia

Who might develop an Addisonian Crisis?
- Patients with Addison’s disease (primary adrenal insufficiency)
- Patients with pituitary disease (secondary adrenal insufficiency)
- Patients treated with exogenous steroids
  o (e.g. ≥ 5 mg prednisolone daily [or equivalent doses of other steroids] for ≥ 4 weeks within the past 3 months, or ≥ 40 mg prednisolone daily for >1 week within the past 3 months)

What might cause an Addisonian Crisis?
- Infection
- Vomiting and/or diarrhoea
- Major stress e.g. an accident, an operation

What are the features of an Addisonian Crisis?
- Shock
  o Low blood pressure
- Confusion
  o Reduced level of consciousness
- Abdominal pain (including “acute abdomen”)
  o Nausea and vomiting

What biochemical abnormalities might there be?
- Maybe none if caught early
- Low sodium
- High potassium
  o (not in pituitary patients)
- Low glucose

What about the patient’s other hormone replacement therapy?
- In the acute emergency setting, patients only need IV/IM hydrocortisone and IV 0.9% normal saline
- Please seek urgent endocrine advice for patients on DDAVP
- Please refer ALL patients admitted with an Addisonian crisis to the endocrine team for further advice
- Please report all incidents of Addisonian crisis in a patient with known hypoadrenalism on the Datix system (diabetes & endocrinology)

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