Adrenal Insufficiency / Addisonian Crisis Emergency Management

NHS
University Hospitals Sussex
NHS Foundation Trust

Patients at Risk

- Pre-existing Addison's disease (primary adrenal insufficiency)
- Pituitary disease (secondary adrenal insufficiency)
- Patients on chronic steroid treatment: ≥5 mg prednisolone daily (or equivalent dose of other steroids) for ≥4 weeks in the last 3 months OR ≥ 40 mg prednisolone daily for >1 week in the last 3 months
- Patients on immunotherapy with checkpoint inhibitors

Precipitants:

- Infection
- Dehydration
- Diarrhoea
- Vomiting
- Major stress
- Trauma

Diagnostic measures should not delay treatment. If Addisonian crisis suspected, treatment should commence without delay

Closely monitor for biochemical abnormalities

- Hyponatraemia
- Hyperkalemia (not in pituitary patients)
- Hypoglycaemia

MAY BE NONE IF CAUGHT EARLY

Immediate Management

→ Hydrocortisone 100 mg IV/IM STAT (continue 50 mg QDS regularly)
→ IV fluids: 1 L 0.9% NaCl in the first hour
→ Further IV hydration (several litres may be required over 24 hours)
Monitor for fluid overload in elderly, cardiac and renal impairment
→ Monitor capillary blood glucose and treat hypoglycemia

Clinical Features

- Hypotension
- Dizziness
- Collapse
- Hypovolemic shock
- Fatigue
- Confusion
- Delirium
- Impaired level of consciousness
- Abdominal pain/cramps
- Nausea/vomiting
- Weight loss

There are no adverse consequences of initiating life-saving hydrocortisone treatment.

If the diagnosis is unclear, it can be safely and formally established when the patient has clinically recovered.

Seek urgent endocrine advice for patients on DDAVP (desmopressin)

Report all incidents of Addisonian crisis for patients with known adrenal insufficiency or hypopituitarism on the DATIX system