Foundations Frameworks

Approach to the Agitated Patient

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Initial Stabilization

- Agitated, violent patients are a danger to both themselves and the ED staff. Gaining rapid control over the situation is vital to emergent diagnosis and treatment in these critically ill patients. To manage these patients:
  - Attempt verbal de-escalation and determine patient capacity to make decisions
  - Benzodiazepines: midazolam IM 5-10 mg or lorazepam IM 2-4 mg and repeat (every 30 to 60 minutes)
    - Versed more lipid soluble, faster onset
  - Haldol: 5-10 mg IM (can repeat every hour). Can worsen neuroleptic malignant syndrome, rule out NMS before administration. Can consider olanzapine (Zyprexa) 5-10 mg IM/IV (re-dose after 2-4 hours) or ziprasidone (Geodon) 10 mg IM (re-dose every 2-4 hours)
  - Ketamine: IM 2-5 mg/kg. Can take 5-10 min to see clinical effects (avoid in patients with schizophrenia)
  - Intubation: don't delay evaluation in these critically ill patients. Intubation can help facilitate IV access, vital sign measurement, further imaging
  - Obtain a core temperature

Febrile Agitated Patient

- Non-infectious causes:
  - Sympathomimetic Toxicity
    - Cocaine, methamphetamines, PCP, synthetic cannabinoids, ecstasy, bath salts
    - Patients with anticholinergic poisoning may also present with AMS, agitation, and fever
  - ETOH withdrawal/benzodiazepine withdrawal
  - Neuroleptic Malignant Syndrome (antipsychotics), Serotonin Syndrome (serotonergic meds)
  - Thyrotoxicosis
  - Environmental hyperthermia
  - *These patients need benzodiazepines, cooling, and fluids*
    - *Titrate to effect*
- *Infectious causes:* Evaluate and treat for infectious etiologies, sepsis, encephalitis

Afebrile, Agitated Patient

- Rule out medical causes of agitation by thinking through altered mental status differential, don't forget to include the 'Febrile' causes in the differential as well:

        - Abnormal vital signs: hypoxia (air hunger), hypercapnia, HTN encephalopathy
        - Toxicologic/Metabolic:
            - Toxicologic poisoning - patients with sympathomimetic, anticholinergic, ETOH W/D or benzodiazepine W/D, look for signs like dilated pupils, diaphoresis, tachy/HTN to indicate tox etiology
            - Thyroid Storm – send thyroid studies
            - Check CPK to r/o rhabdo
            - Check CBC, chem, lactate, VBG, ammonia, etc.
        - Structural: intracranial hemorrhage, post-ictal states
        - Infectious: meningitis, encephalitis, sepsis
        - If not a medical cause, then evaluate for primary psych diagnosis

Psychiatric Emergency

- Mania, schizophrenia, psychosis, anxiety
- Haldol 5-10 mg IM and repeat
    - Prolongs QTc, check EKG if giving multiple rounds
    - Can also use olanzapine (Zyprexa), ziprasidone (Geodon)

Excited Delirium Syndrome

- These patients typically have severe agitation, are combative, and have altered mental status
    - Cases are frequently associated with sympathomimetic use and psychiatric comorbidities and leads to a final common pathway of diaphoresis, tachycardia, hypertension, insensitivity to pain, and severe agitation
- These patients must be treated emergently with benzos and possibly cooling techniques
- Must obtain chemical control of the patients and minimize physical restraints as they can exacerbate the physiologic derangements and may lead to death
    - Initially, you will likely need to physically restrain the patient, but the goal should be to get them out of restraints and chemically sedated as soon as possible

References:

- Takematsu, Mai; Rao, Rama. Toxicologic Hyperthermic Syndromes. Decision Making in Emergency Critical Care. An Evidence Based Handbook. Chapter 47. Pg 606-615. 2015
- Moore, Gregory; Pfaff, James. Assessment and Emergent Management of the acutely agitated of violent adult. Uptodate.com September 2016.