

## ***Serotonin syndrome***

- Fever, hypertension, tachypnea, tachycardia, hyperreflexia, clonus, tremors, and altered mental status
- Hunter Serotonin Toxicity Criteria decision rules
  - Exposure to a serotonergic agent and at least one of five conditions
    - Spontaneous clonus
    - Inducible clonus + agitation or diaphoresis
    - Ocular clonus + agitation or diaphoresis
    - Tremor + hyperreflexia
    - Hypertonia + temperature >39.0°C + clonus
- Increase risk
  - Linezolid and antidepressants
  - Combination of fentanyl with linezolid has also been associated
- Treatment
  - Discontinuation of precipitating agents
  - If no improvement:
    - Benzodiazepines and if symptoms persist Cyproheptadine
  - Dantrolene is the treatment of choice for malignant hyperthermia and is sometimes used to treat severe neuroleptic malignant syndrome but is not effective in treating serotonin syndrome
- Differential diagnosis
  - Neuroleptic malignant syndrome and malignant hyperthermia have some similarities to that of serotonin syndrome
    - Neuroleptic malignant syndrome: the offending drugs are antipsychotics.
      - Benzodiazepines is the treatment of choice and dantrolene may be added depending on severity of symptoms
    - Malignant hyperthermia: occurs immediately after the administration of anesthetic gases such as isoflurane or succinylcholine
      - Dantrolene is the treatment of choice and perform intubation if ETT not in place