

# Serotonin Syndrome





## Serotonin Syndrome

Lots of medicines used in mental health, as well as painkillers and other drugs have an impact on the levels of serotonin in the brain. These can cause a potentially dangerous reaction which presents as confusion, agitation, fast heart rate, sweating and shaking. Symptoms can vary from mild to severe, can begin within hours and should be treated immediately.



### Signs and symptoms

- Hypertension
- Tachycardia
- Hyperthermia
- Increased bowel sounds
- Dry Eyes
- Excessive sweating
- Tremor
- Clonus (involuntary rhythmic muscular contraction and relaxations)- inducible or spontaneous
- Patient may feel stiff in their muscles and joints
- Hyperreflexia (having overresponsive reflexes)
- Altered mental state
- Anxiety
- Agitation
- Confusion
- Coma



#### Causes

SS may be produced by large doses/ overdose of a single drug or by combinations of drugs. The most common causative combinations include a monoamine-oxidase inhibitor (MAOI).

Drugs implicated in SS include:

- Antidepressants, St John's wort, lithium
- Analgesics: tramadol, pethidine, fentanyl
- Antiemetics: odansetron, metoclopramide
- Recreational: cocaine, MDMA, amphetamines, LSD



### Ward Based Management

- Organise immediate medical review
- Medications should be reviewed
- Fluids should be given for dehydration
- Cool patient down
- Physical observations:
  - Heart rate
  - Blood Pressure
  - Temperature
  - Respiratory rate