

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 shows itself as confusion, agitation, fast heart rate, sweating and tremor.

Symptoms can vary from mild to severe, can begin within hours and should be treated immediately.



Signs and symptoms

- Hypertension
- Tachycardia
- Hyperthermia
- Hyperactive 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