



## CLINICAL GUIDELINE

# Serotonin Toxicity Treatment (Poster)

A guideline is intended to assist healthcare professionals in the choice of disease-specific treatments.

Clinical judgement should be exercised on the applicability of any guideline, influenced by individual patient characteristics. Clinicians should be mindful of the potential for harmful polypharmacy and increased susceptibility to adverse drug reactions in patients with multiple morbidities or frailty.

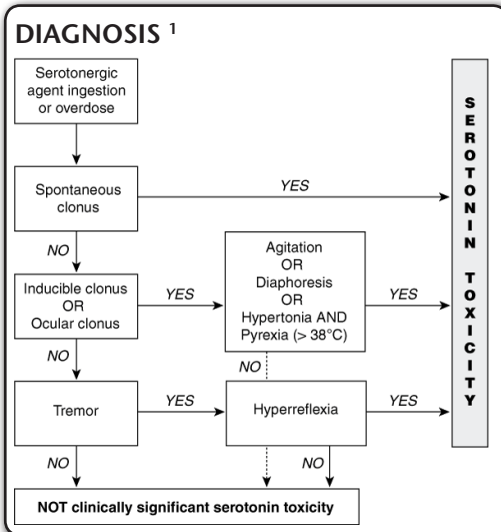
If, after discussion with the patient or carer, there are good reasons for not following a guideline, it is good practice to record these and communicate them to others involved in the care of the patient.

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<b>Lead Author:</b>	Richard Stevenson
<b>Approval Group:</b>	Glasgow Emergency Medicine Clinical Governance Group.

### Important Note:

The Intranet version of this document is the only version that is maintained. Any printed copies should therefore be viewed as 'Uncontrolled' and as such, may not necessarily contain the latest updates and amendments.

# TREATMENT OF SEROTONIN TOXICITY



## DRUG DOSES

CYPROHEPTADINE -12mg PO/NG STAT THEN 8mg EVERY 6 HOURS

CHLORPROMAZINE – 25mg IM (may drop blood pressure)

DIAZEPAM – 10mg IV (large doses may be required e.g. 40mg)

DANTROLENE – 1-2.5mg/kg (repeated up to 10mg/Kg)

LORAZEPAM – 4mg IV (additional doses may be required)

## INITIAL BLOOD INVESTIGATION SET

FBC + COAG + U&E + LFT + Ca + PO<sub>4</sub> + GLUCOSE + CK + Mg + VENOUS GAS

## RSI & SEROTONIN TOXICITY

DO NOT USE FENTANYL/ALFENTANYL DUE TO SEROTONERGIC ACTION

DO NOT USE SUXAMETHONIUM DUE TO HYPERKALAEMIA

## RECOMMENDATIONS

THIOPENTONE 3-5MG/KG (AVOID KETAMINE)

ROCURONIUM 1MG/KG FOR INDUCTION

ATRACURIUM FOR ON GOING MUSCLE PARALYSIS

## MILD TOXICITY

### FEATURES

ANXIETY  
RESTLESSNESS  
PALPITATIONS

### TREATMENT

PO BENZODIAZEPINE

## MODERATE TOXICITY

### FEATURES

TEMP 38-39.9°C  
TACHYCARDIA, SWEATING  
CLONUS, HYPER-REFLEXIA  
AGITATED, HALLUCINATIONS

### TREATMENT

BEGIN COOLING MEASURES  
IV FLUIDS 1-2 LITRES  
IV BENZODIAZEPINE  
(REPEATED AS NECESSARY)  
CYPROHEPTADINE

## SEVERE TOXICITY

### FEATURES

≥TEMP 40°C  
TACHYCARDIA, HYPERTENSION, SWEATING  
HYPERTONICITY, HYPERREFLEXIA  
MENTAL OBTUNDATION

### TREATMENT

AGGRESSIVE COOLING  
IV FLUIDS 1-2 LITRES  
IV BENZODIAZEPINE  
RSI + ONGOING PARALYSIS  
CYPROHEPTADINE OR CHLORPROMAZINE  
CONSIDER DANTROLENE  
IV 1.26% NaHCO 500ML (FOR RHABDOMYOLYSIS)

## SUPPORTIVE CARE

### PYREXIA

Use cooled fluids IV and for bladder lavage  
Ice over whole body  
Antipyretics have no role

### HYPOGLYCAEMIA

IV Dextrose 50 ml 50% (may need many repeat doses)

### HYPERKALAEMIA

IV 1.26% Sodium Bicarbonate 500ml  
IV Calcium Gluconate 20ml 10% solution  
Avoid insulin in hypoglycaemic patients

### RHABDOMYOLYSIS

IV fluids  
IV 1.26% NaHCO 500ml

1. Isbister GK, Buckley NA, Whyte IM. Serotonin toxicity: a practical approach to diagnosis and treatment. Med J Aust 2007; 187:361-365