

SCRAs are structurally diverse molecules exhibiting full cannabinoid receptor agonism and producing a wide range of organ toxicity. Rx is supportive.

## Toxicity

Phytocannabinoids including cannabis / THC are less potent than SCRAs

*SCRAs are often incorrectly called “synthetic cannabis”*

*SCRAs are usually lacquered onto herbal material and smoked. They are also vaped. Seldom taken orally or IV.*

*The effective dose is difficult to estimate. Potency plus ability to cause organ toxicity varies amongst SCRAs.*

## Clinical features

Most common clinical features (onset within 1-2 hours):

- Tachycardia, nausea / vomiting, seizures, altered conscious state (confusion, agitation, sedation)

### Wide range of organ toxicity reported:

**CVS** -  $\uparrow/\downarrow$ HR,  $\uparrow/\downarrow$ BP, ACS,  $\uparrow$ QT, myocardial dysfunction

**Neurological** - agitation/aggression, seizures, sedation, confusion, headache, mydriasis, hallucinations, SAH, stroke

**GI** - nausea, vomiting (including hyperemesis)

**Renal** - AKI (may require dialysis), rhabdomyolysis

**Psychiatric** - anxiety, psychosis, paranoia

**Other** - hypokalaemia, acidosis, pulmonary infiltrates

## Management

The majority of patients recover fully with simple supportive care and a period of observation in ED

### ABC

Secure airway via endotracheal intubation as required. Treat shock initially with IV crystalloid (10-20 mL/kg). Discuss with clinical toxicologist if hypotension persists.

### Decontamination

Activated charcoal is not indicated in most cases as exposure is via inhalation and there is a risk of  $\downarrow$ GCS

### Seizures

Benzodiazepines: Diazepam 5 mg IV every 5 minutes as necessary

### Mild Agitation

Benzodiazepines: Diazepam 2.5-5 mg IV q10 minutes or 5-10 mg PO q30 minutes until lightly sedated

### More Significant Agitation & Aggression

Resistant acute behavioural disturbance may be treated with titrated doses of droperidol 10 mg IM / 2.5-10 mg IV initially and/or benzodiazepines.

### Other Supportive Care

Look for and treat dehydration. Check renal function. Correct electrolyte abnormalities.

### Disposition

- Observe symptomatic patients for at least 6 hours and until asymptomatic
- Admit patients requiring airway / inotrope support / ongoing seizures to a critical care setting