

CHECKLIST

TRICYCLISCHE ANTIDEPRESSIVA (TCA) POISONING

Algemeen

!Anticholinergic syndrome with rhythm and conduction disorders!

Symptoms

Phase 1

- Agitation, confusion, hallucinations, mydriasis

Phase 2

- Tachycardia and hypertension

Phase 3

- **Rhythm and conduction disorders (wide QRS and VT/VF), cardiogenic shock with hypotension, seizures**

Basic approach

- ABCD-approach
- 2x IV access
- Monitor met capnography
- ECG
- Labs: arterial blood gas, electrolytes, glucose, renal function
- Early intubation due to hemodynamic instability
- Early connection to defibrillator due to risk of arrhythmia

Gastric lavage, activated charcoal, hemodialysis

- **Consider gastric lavage and activated charcoal in an awake patient** following ingestion of a potentially lethal dose within 1-4 hours
- **No** role for hemodialysis

Specific treatment

Widened QRS

Widened QRS complex $>120\text{ms}$ or QRS $>100\text{ms}$ with hypotension/hypoxia/acidosis

1. **Sodium bicarbonate 8.4%: 100 ml IV over 5 minutes**

2. Repeat every 5 minutes if necessary

- *Contraindication: pH >7.55*
- *Recommendation: frequently monitor blood gases to assess pH*

If refractory or pH >7.55

3. **Sodium chloride 3%: 100 ml IV.** Repeat if necessary

If patient remains hemodynamically instable:

4. **Lidocaine 1-1.5mg/kg.** Repeat every 5 minutes if necessary, up to maximum dose of 300mg.

VT

1. **Sodium bicarbonate** as outlined above

2. **Electrical cardioversion** under sedation

3. Refractory after ECV: Lidocaine as outlined above

4. Magnesium sulfate 2grams IV for polymorphic VT

Amiodarone is contraindicated!

Hypotension

1. **Fluid bolus: 500 ml Ringer's lactate**

2. **Sodium bicarbonate** as outlined above

3. **Norepinephrine:** 0.05mcg/kg/h.

Titrate every 5 minutes to desired effect.

4. Sodium chloride 3%: 100 ml IV. Repeat if necessary.

Refractory shock

1. **ECMO**

OR

2. **Intralipid 20% iv** (note: intralipid and ECMO should not be used together)

Bolus 1.5ml/kg over 2-3 minutes. Repeat after 5 minutes if insufficient effect. Then administer 0.25ml/kg/min.

Amiodarone is contraindicated!

As in an epileptic seizure:

1. Midazolam 5mg IV bolus
2. After 5 minutes: Repeat midazolam 5mg IV
3. After 10 minutes: Keppra 60mg/kg IV over 8 minutes
4. After 15 minutes: Valproate 40mg/kg IV
5. After 20 minutes: Midazolam or propofol bolus + continuous infusion

Treat aggressively due to worsening acidosis!

Consider early intubation.

Phenytoin is contraindicated!

Contraindicated medications

- **Amiodarone**
- **Beta-blockers**
- **Calcium channel blocker**
- **Procainamide**
- **Phenytoin**
- **Flumazenil**
- **Physostigmine**