

TOXIDROMES

TOXIDROMES

ANTICHOLINERGIC

- Mydriasis
- Blurred vision
- Fever
- Dry skin
- Flushing
- Ileus
- Urinary retention
- Tachycardia
- Hypertension
- Psychosis
- Myoclonus
- Seizures

ANTIDOTE:
physostigmine /
treat symptoms

MANAGEMENT

- ✓ Maintain an open airway and assist ventilation if needed
- ✓ Treat (if they occur):
 - Hyperthermia....external rapid cooling
 - Seizures.....benzodiazepine

MANAGEMENT

- ✓ A small dose of **physostigmine** (0.5-1 mg IV in an adult), given to patients with severe toxicity
- ✓ **Precaution:** can cause AV block, asystole, and seizures, especially in patients with tricyclic antidepressant overdose
- ✓ **Decontamination:** administer activated charcoal orally (gastric lavage is not needed)

TOXIDROMES: SYMPATHOMIMETIC

منشط

SYMPATHOMIMETIC (COCAINE, AMPHETAMINES)

- MYDRIASIS
- TACHYCARDIA
- HYPERTENSION
- FEVER
- SWEATING
- **SEIZURES**

احفظو انهم
يعملو زياده
بالافرازات

ANTIDOTE:
benzodiazepines

TOXIDROMES

NARCOTIC

Papaver somniferum
“poppy plant”



TOXIDROMES

مخدر

NARCOTIC (HEROIN, METHADONE)

- ❖ MIOSIS
- ❖ CNS DEPRESSION
- ❖ BRADYCARDIA
- ❖ HYPOTENSION
- ❖ HYPOVENTILATION
- ❖ HYPOTHERMIA
- ❖ COMA
- ❖ DEATH

ANTIDOTE:
naloxone

عادة الي بكونو بتعاطو ما بوخذو نوع واحد بس وانما بكون خليط

ممکن يكون narcotic مع AMPHETAMINES
فاذا كان عندهم صعوبه بالتنفس بعطيهم nalxon
ف بهاي الحاله رح يصير معهم with drowal
ف الاثار الجانبيه بهاي الحاله بصيرو عكس اعراض narcotic

TOXIDROMES

WITHDRAWAL



TOXIDROMES

WITHDRAWAL: (ALCOHOL, NARCOTICS, SEDATIVE
- HYPNOTICS, antiHTN DRUGS

- DIARRHEA
- MYDRIASIS
- TACHYCARDIA
- HYPERTENSION
- CRAMPS
- LACRIMATION
- SEIZURES
- HALLUCINATIONS

زي المنشطات

ANTIDOTE:
benzodiazepines

يتشابهه مع narcotic ولكن الفرق انو بالنار كوتك في conctabation	بزيد الافرزات بكل مكان
---	------------------------------

Table 7. Common Toxidromes.

Cholinergic (organophosphates) (DUMBELS)

Diarrhea, diaphoresis
Urination
Miosis
Bradycardia,
bronchosecretions
Emesis
Lacrimation
Salivation

هاد بنشف

Anticholinergic (antihistamines, TCAs)

كل اشى

Hyperthermia (HOT as a hare, RED as a beet)
Dry skin (DRY as a bone)
Dilated pupils (BLIND as a bat)
Delirium, hallucinations
(MAD as a hatter)
Tachycardia
Urgency retention

Sympathomimetic (cocaine, amphetamines)

Diaphoresis
Mydriasis

Tachycardia
Hypertension
Hyperthermia
Seizures

Narcotic (heroin, methadone)

Miosis
Hypoventilation
Coma
Bradycardia
Hypotension

Withdrawal (from alcohol, opioids, benzodiazepines,

barbiturates, antihypertensives)

Diarrhea
Mydriasis
Goose flesh
Tachycardia
Lacrimation
Hypertension
Yawning
Cramps
Hallucinations
Seizures (with ETOH and benzodiazepine withdrawal)

sympatho وهاد بشبيهه

بكل اشى ولكن الي بميزه عن
الانتيكويينيرجك انو عنده زياده
hyperthermia بالتعرق

SPECIFIC ANTIDOTES

عندي اذا في واحد ماخذ
انتيكولينيرجك
ف بعطيه physostigmine
ولكن بخاف انو يصير معه
Avblock الحل بعطيه ل
bicarbonateNa
حتى اقلل cardiotoxicity
انا بعمل ل salicylate
Methenol
Ethelenglycol
Ion trapping
بحول lurin قاعدي لاتخلص من
هدول الادويه

Table 8 Specific Antidotes and Their Indications *

Antidote	Indication	Comments
Bicarbonate, sodium	TCA; For urine alkalinization in salicylate overdose; for severe metabolic acidosis from ASA, ethylene glycol, or methanol.	Use for TCA cardiotoxicity, not neurotoxicity. Urinary alkalinization may benefit rhabdomyolysis as well. Difficulty alkalinizing urine may be due to hypokalemia. Watch for complications from hypernatremia, volume overload, and serum pH above 7.5
Dantrolene Muscle relaxant	Malignant hyperthermia	Give in patients who do not respond to neuromuscular paralysis, may aggravate respiratory depression. ⁴³
Diazoxide K+ channel activator/vasodilator	Sulfonylureas	Diazoxide inhibits insulin secretion. Use when serum glucose concentrations cannot be adequately maintained by IV 5% dextrose infusion
Digibind	Digoxin/ Digitalis/ Cardiac glycosides	Use for cases involving life-threatening arrhythmias or hyperkalemia (>5 meq/L)
Flumazenil	Benzodiazepines	Half-life = 40-80 min but duration of action 90 min. ⁴⁴ Do not administer in any patient at risk for seizures or withdrawal.
N-acetylcysteine	Acetaminophen	Most effective administered within 8-10 h of ingestion. Controversy as to best route (IV vs oral) and duration of therapy. 36 h likely adequate in uncomplicated cases. ⁴⁵

هي حاله خطيره
تؤدي للموت في
حالات التخدير

سبب حدوثها أصلا
طفره بالجين ف
هاي بتطلع

الكالسيوم من
الخلايا ويصير

عندي atrophy
الحل امنع

الكالسيوم يطلع من
الخلايا

ما بفرق iv او oral
وممكن يجيب تاثير
حتى بعد مرور 36
ساعه

اذا واحد متعود عليه وسحبته
فجاه ممكن يعمل seizure

بحاله في خلل بالكليه طول ما عندي سلفا رح
يزيد الانسولين ويعمل hypoglycemia
K يقلل افراز الانسولين وكمان في اشي بزيد
السكر بالدم وهو somatostatin

هاد مده تاثيره
أطول ولكن غالي

تاثيره قليل
45 دقسه بس

حكينا قبل انو
يرفع السكر بالدم

أي واحد بصير
مع seizure
بعطيه
benzodiazepine
ولكن اذا كان
سبب seizure
Pyridoxine
الي هو vit6
هو نقص فيه
البينزو ما رح
يجاب

Nalmefene	Narcotics	Half-life=8-10 h, but duration of effect approximately 4 h. Disadvantage is cost (\$6.50/0.25 mg vs \$0.30/ 0.4 mg of naloxone)
Naloxone	Narcotics	Half-life=1 hour; duration of effect 45 min. Beware of exposing the dangerous effects of coingestion such as cocaine or PCP ⁴⁶
Octreotide	Sulfonylureas	A somatostatin analog suppresses insulin and C-peptide levels, permitting the plasma glucose to rise without additional dextrose support.
Somatostatin analogue / inhibit insulin		
Pyridoxine	Isoniazid	Give in gram-to-gram ratio or 5 g empiric dose; consider as empiric therapy in unknown seizure overdose not responding to benzodiazepines.
Peripheral neuropathy due to pyridoxine depletion		
Thiosulfate/nitrites	Cyanide	Do not give nitrates in the setting of smoke inhalation since the resulting methemoglobinemia may exacerbate carbon monoxide poisoning. ⁴⁷⁻⁴⁹
Vitamin K	Coumarin and indanedione derivatives	Must use Vitamin K1, not Vitamin K3. Even after IV dose, there is a 6-8 h delay before coagulation factors begin to achieve significant levels. Use fresh frozen plasma for immediate control of hemorrhage.
*TCA = tricyclic antidepressants.		

يمنع الخليه تمسك
ف بعطيهم O2
ولكن thio-nitr
بدي انتبه اذا
تعرض له وشمه