

Medi Quest BRS Hospital

A monthly News letter from BRS Hospital

POISONING IN CHILDREN

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Price Rs. 5/- Only

November- 2018

Medi - 22

Quest -11

Yearly Subscription

Rs 50/- only

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When history non contributory consider poisoning in any child with unexplained, coma, seizures or affective disorder.

Resuscitation :

If airway compromise or respiratory failure intubate, ventilate preferably with cuffed endotracheal tube.

Poor perfusion 10-20ml/kg of N.S. repeat if necessary.

Comatose victims:

In addition to above measures give 2.5ml/kg of 10% Dextrose in neonate and 1ml/kg of 25% dextrose child.

Give Naloxone 0.1mg/kg IV for children less than 20 kg and 2mg IV for children > 20kg. Repeat 2-5 min interval upto a total of 10mg as needed.

Place on cardiac monitor collect urine, blood and gastric Aspirate for toxicologic analysis

INVESTIGATIONS :

Check electrolytes, Urea, Creat. Sugar, LFT, Ammonia glucose, blood gas, Anion gap, ECG.

EXAMINATION

Tachycardia : Alcohol, amphetamine, theophylline, anticholinergics

Bradycardia : Cyclic anti depressants, narcotics, digitalis, barbiturates
And cholinergics.

Tachypnoea : Salicylates, amphetamines, carbonmonoxid

Slow respirations : Ethanol, barbiturates

narcotics

Apnoea : Organo phosphates

Hyperthermia : Salicylates amphetamines

Pic (1) - Contracture right Mid & Ring finger.



**GENERAL MEDICINE , GENERAL SURGERY,
PEDIATRICS AND NEONATOLOGY
PLASTIC AND COSMETIC SURGERY ENT SURGERY,
OB AND GYN
UROLOGY , VASCULAR AND NEUROLOGY**



- Hypothermia : Barbiturates, phenothiazines
narcotics and ethanol
- Hypertension : Amphetamines, cocaine,
anticholinergics, theophylline
- Hypotension : Narcotics, phenothiazine
antihypertensives, diazepam

NEUROLOGIC

- Coma : Narcotics, sedative
hypnotics, barbiturates,
alcohol, Carbonmonoxide
- Ataxia : Phenytoin, benzodiazepines,
organic solvents
- Seizures : Theophylline
- Dystonic reaction : Phenothiazines,
metoclopramide

EYES

- Miosis : Opiates, barbitalates,
phenothiazines,
organophosphates
- Mydriasis : Amphetamines,
anticholinergics
- Nystagmus : Phencyclidine & Phenytoin.

SKIN

- Hot dry skin : Anticholinergics
- Diaphoresis : Salicylates
- Cyanosis : Meth hemoglobinemia,
hypoxia, carbon monoxide

GI TRACT

- Urinary retention : Anticholinergics

MANAGEMENT

Gastrointestinal Decontamination

- Gastric Lavage : Performed within 1 hour of
ingestion.

Contra indicated in corrosive ingestion, comatose,
seizing and child who is unable to protect airway.

Use warm normal saline – 10ml/kg / cycle max
.300ml

Use large Orogastric tube

Continue lavage till several returns are clear.

Note : Routine use of Gastric Lavage in the
management of Poisoned patients is no longer
recommended by American Academic of clinical
Toxicology

ACTIVATED CHARCOAL:

Single Dose Activated Charcoal (SDAC)

Children up to one year of age: 10-25gms or 0.5 to
1.0gm/kg

Children 1-12years of age : 25-50gms or 0.5 to
1.0gm/kg

Adults and Adolescents : 50gms

Given in a premixed slurry of 250ml diluent / 50gm
of charcoal (preferred diluent water)

Multiple Dose Activated Charcoal (MDAC)

Multi dose Activated Charcoal (MDAC)

Initial doses 1gm/kg (with Sorbitol) subsequent dose
0.5gm/kg every 4hours till symptoms have resolved
(without Sorbitol)

HEMODIALYSIS in Drug over dosage with
theophylline, lithium, salicylates, methanol, ethylene
glycol and the alcohols.

POISON**ANTI DOTE****DOSE**

Acetaminophen
Single Toxicdose
150mg/kg Child
> 7.5gms Adult
Chronic Ingestion >
90mg/kg/day for several days

Nacetyl cysteine

IV NAC 21hour course Use ½ NS as diluent

Note : Can use Activated
Charcoal if seen within 4hrs
ingestion. Draw blood for
Paracetamol levels 4hours.
ingestion.

<20kg loading dose
150mg/kg in 3ml /kg diluent
IV over 1hour followed by 50mg/kg in 7ml /kg diluent
given IV over 4 hours followed by 100mg/kg in of
ingestion over 16hrs.

>20kg Loading dose 150mg/kg in 100ml over 1hour
followed by 50mg/kg in 250ml diluent on 4hrs
followed by 100mg/kg in 500ml diluent administered
over 16hrs

1ml Mucyst Neon = 200mg of N. Acetyl cysteine

ORAL NAC

72hr course 140mg/kg of NAC loading dose followed by
17doses of 70mg/kg every 4hours total dose 1330mg/kg

Iron

Desferroxamine

Infusion 15mg/kg/hr For 4 hrs and decrease To 2-5mg/kg/h
Max 6 gm /24 hr or 120mg /kg which ever is less

Opioids

Naloxone

0.1mg/kg IV in children Upto 20kg
2mg Iv in Children > 20kg Can be
repeated every 3minutes till improvement noted.
Cumulative Doses above 10mg in 30minutes is unlike to
yield benefits

Organophosphorous

Atropine

0.05mg/kg IV Continued q 3-5 min until drying of
pulmonary secretions. Adult dosing 2-5mg every 3-

5minutes.

If no effect is noted, the dose should be doubled every three
to five minutes until pulmonary muscarinic signs
(Therapeutic endpoint is clearing of a respiratory secretions
and cessation of Broncho constriction.

Pralidoxime

After Atropinisation
25-50mg/kg/dose in NS (Max 2gm) IV slowly repeat in 30
mints if no improvement at 2 hours and q 8-12h prn. Note:
Use within 36 hrs. of ingestion Not useful in carbamate
poisoning (Baygonspray)

Cyanide

Hydroxocobalamin +70mg/kg max up to 5gm IV
Sodium Thiosulfate 25% 1.65ml/kg IV slowly 3-5ml/hr

Or

Sodium Nitrite 10mg/kg IV slowly
+ Sodium Thiosulphate dose as above

Or

Sodium Thiosulphate alone. May repeat dose once

Isoniazid	Pyridoxine	100mg for every 100mgOf INH ingested IV; fluids With 3cc /kg of Hco3 Diazepam for seizures
Benzodiazepine	Flumazenil	Flumazenil Initial dose 0.01mg/kg given IV over 15 seconds max dose 0.2mg. The initial dose may be followed at one or more minute intervals with upto 4 repeat doses of 0.005mg to0.01mg/kg (max 0.2mg/dose). The maximum dose should not exceed 1mg total or 0.05mg/kg. In adults initial dose 0.2mg given over 30seconds. Repeat doses of 0.2mg to a maximum of 1mg can be given till desired effect is achieved Peak effect of Flumazenil occurs 5-10min after IV administration Note : Risk of seizures in those with Chronic Benzo Diazepine use. Wait for Longer periods between doses.
Phenothiazine	Diphenhydramine	5mg/kg 24 hrs. in 4 div. Dose
Metaclopramide	Diphenhydramine Benztropine	1.25mg/kg/dose 6hrly (0.02- 0.05mg/kg max 2mg / kg/day and once or twice /day)
Barbiturates	Lavage	MDAC (Multiple dose Activated Charcoal) initial dose 1gm/kg max 50gm followed by 0.5gm/kg every 4hrs Urinary Alkalinization Administer IV bolus of 1-2mEq/kg of Soda Bicarb followed by continuous infusion prepared by adding 75mEq of Soda Bicarb in 500ml of 5% GDW and administer at 1.5times maintenance rate Peritoneal dialysis Hemodialysis.

to be continue next issue

Owned and Published by Dr. Madhusudhan 28, Cathedral Garden Road, Chennai - 34.

Printed by S. Baktha at Dhevi Suganth Printers 52, Jani Batcha Lane, Royapettah, Chennai -14.

Publication on : Final Week of Every month Posted on 29.11.2018