

Organophosphate Poisoning

Common agricultural poisoning in Bangladesh. Protect staff first, decontaminate, then atropinise aggressively to a dry chest. Deaths are from bronchorrhoea and respiratory failure — atropine and airway care save lives.

1. PROTECT AND DECONTAMINATE

- ☐ Staff wear gloves and aprons — skin contact poisons rescuers
- ☐ Remove all the patient's clothing; wash skin thoroughly with soap and water
- ☐ Do NOT induce vomiting; gastric lavage only within 1 h and with the airway protected
- ☐ Ventilate the room; seal contaminated clothes in a bag outside

2. RECOGNISE

- ☐ Cholinergic signs: salivation, lacrimation, urination, diarrhoea, vomiting
- ☐ Pinpoint pupils, bradycardia, sweating, bronchorrhoea (crackles both lungs)
- ☐ Muscle fasciculations and weakness — may progress to respiratory failure
- ☐ Confirm from the history or the container brought by family

3. ATROPINISE

- ☐ Atropine 1-3 mg IV bolus (child 0.02-0.05 mg/kg)
- ☐ Double the dose every 5 min until atropinised
Endpoints: chest clear of crackles, secretions drying, heart rate over 80, systolic over 80
- ☐ Pupil size is NOT the endpoint — the chest is
- ☐ Then give 10-20% of the total loading dose per hour, titrated to keep the chest dry
- ☐ Large total doses (tens of milligrams) may be needed — do not under-dose

4. SUPPORT AND REFER

- ☐ High-flow oxygen; suction secretions; bag-valve-mask if breathing fails
- ☐ Diazepam 10 mg IV for seizures or severe agitation
- ☐ Avoid morphine, frusemide and aminophylline
- ☐ Refer deteriorating or ventilator-dependent patients with atropine continuing en route and a trained escort
- ☐ Observe at least 48 h — the intermediate syndrome causes delayed respiratory failure