

# Overdose and Poisoning (Adults)

Table 3.69

## Illegal Drugs

### DRUG

**Cocaine**  
(powder cocaine, crack cocaine).

### DESCRIPTION

Cocaine is a powerfully reinforcing psycho stimulant. Crack is made from cocaine in a process called freebasing.

### OUTWARD SIGNS

Hyperexcitability, agitated, irritable and sometimes violent behaviour. Sweating. Dilated pupils.

### EFFECTS

Induces a sense of exhilaration, euphoria, excitement, and reduced hunger in the user primarily by blocking the re-uptake of the neurotransmitter dopamine in the midbrain, blocks noradrenaline uptake causing vasoconstriction and hypertension.

NB: Crack cocaine is pure and therefore more potent than street cocaine; it enters the bloodstream quicker and in higher concentrations. Because it is smoked, crack cocaine's effects are felt more quickly and they are more intense than those of powder cocaine. However, the effects of smoked crack are shorter lived than the effects of snorted powder cocaine. It is highly addictive even after only one use.

### ADMINISTRATION

Cocaine comes in the form of a powder that is almost always 'cut' or mixed with other substances. It can be: snorted through the nose, rubbed into the gums, smoked or injected. Crack comes in the form of solid rocks, chips, or chunks that are smoked.

### SIDE EFFECTS

The symptoms of a cocaine overdose are intense and generally short lived. Although uncommon, people do die from cocaine or crack overdose, particularly following ingestion (often associated with swallowing 'evidence').

All forms of cocaine/crack use can cause coronary artery spasm, myocardial infarction and accelerated ischaemic heart disease, even in young people.

Various doses of cocaine can also produce other neurological and behavioural effects such as:

- dizziness.
- headache.
- movement problems.
- anxiety.
- insomnia.
- depression.
- hallucinations.

The unwanted effects of cocaine or crack overdose may include some or all of the following:

- tremors.
- dangerous or fatal rise in body temperature.
- delirium.
- myocardial infarction.
- cardiac arrest.
- seizures including status epilepticus.
- stroke.
- kidney failure.

### TREATMENT

- Transfer patient rapidly to hospital.
- Administer supplemental oxygen – **refer to oxygen guideline**.
- Consider assisted ventilation at a rate of 12–20 breaths per minute if:
  - SpO<sub>2</sub> is <90% on high concentration O<sub>2</sub>
  - respiratory rate is <10 or >30
  - expansion is inadequate.
- Undertake a 12-lead ECG – if the patient has a 12-lead ECG suggestive of myocardial infarction and a history of recent cocaine use then administer nitrates but do not administer thrombolysis.
- Administer aspirin and GTN if the patient complains of chest pain – **refer to aspirin and GTN guidelines**.
- **Chest pain** – administer diazepam if the patient has severe chest pain – **refer to diazepam guideline**.
- **Convulsions** – **refer to convulsions guideline**.
- **Hypertension** – if systolic BP > 220 and diastolic BP > 140 mmHg in the absence of longstanding hypertension – seek medical advice.
- **Hyperthermia** – administer paracetamol and cooling if the body temperature is elevated – **refer to paracetamol guideline**.

NB Swallowed crack cocaine represents a severe medical emergency and needs **URGENT** transportation to hospital **EVEN IF ASYMPTOMATIC**.