

**Comment(s)**

This is the only paper identified that compares morphine and diamorphine in this clinical situation. The doses were fixed.

**► CLINICAL BOTTOM LINE**

There are no significant clinical differences between diamorphine and morphine in patients with chest pain.

**Scott ME, Orr R.** Effects of diamorphine, methadone, morphine, and pentazocine in patients with suspected acute myocardial infarction. *Lancet* 1969;i:1065-7.

## Type of oral corticosteroid in mild to moderate croup

Report by **A Corfield**, *Specialist Registrar*

Checked by **S Teece**, *Clinical Research Fellow*

**Abstract**

A short cut review was carried out to establish whether oral dexamethasone is better than oral prednisolone at improving outcome in children with mild to moderate croup. Altogether 139 papers were found using the reported search, of which none presented any evidence to answer the clinical question. It is concluded that there is no evidence available to answer this question. Further research is needed.

**Clinical scenario**

A 3 year old boy arrives in the emergency department in the early hours of the morning. His mother reports that he has been unwell for 24 hours with a barking cough. On examination he is well and active but has stridor at rest. His temperature is normal, there is no indrawing and oxygen saturations are normal. You know that oral corticosteroids reduce the length of illness and need for hospital admission but wonder whether to use oral dexamethasone or oral prednisolone.

**Three part question**

In [patients with mild to moderate croup] is [oral dexamethasone better than oral prednisolone] at [improving outcome]?

**Search strategy**

Medline 1966-02/03 and EMBASE 1980-02/03 using the OVID interface. [exp prednisolone OR prednisolone\$.mp OR exp prednisone OR prednisone\$.mp OR exp steroids OR

steroid\$.mp OR exp dexamethasone OR dexamethasone\$.mp] AND [exp croup OR croup\$.mp OR exp laryngotracheobronchitis OR laryngotracheobronchitis\$.mp OR exp laryngotracheitis OR laryngotracheitis\$.mp] LIMIT to human AND English.

**Search outcome**

Altogether 139 papers were identified. None answer the question.

**Comment(s)**

Croup is a common problem in the paediatric population. Oral corticosteroids are as effective as nebulised corticosteroids and are cheaper. Oral dexamethasone has an effective half life of 48 hours compared with 24 hours for prednisolone. Unfortunately there are no data directly comparing the efficacy of these two treatments.

**► CLINICAL BOTTOM LINE**

There is no evidence available to answer this question. Local advice should be followed.

## Glucagon in tricyclic overdose

Report by **S Teece**, *Clinical Research Fellow*

Checked by **K Hogg**, *Clinical Research Fellow*

**Abstract**

A short cut review was carried out to establish whether the addition of glucagon to standard treatments improves clinical outcome in patients who have taken an overdose of tricyclic antidepressants. Altogether 31 papers were found using the reported search, of which three presented the best evidence to answer the clinical question. The author, date and country of publication, patient group studied, study type, relevant outcomes, results, and study weaknesses of these best papers are tabulated. A clinical bottom line is stated.

**Clinical scenario**

A 27 year old woman attends the emergency department with a suspected amitriptyline overdose. She has a Glasgow Coma Scale score of 7, is trypsilating, and has a broad complex tachycardia with a blood pressure of 70/30. After intubation and ventilation and sodium bicarbonate she remains tachycardic at 130 although her complexes have narrowed

**Table 2**

Author, date and country	Patient group	Study type (level of evidence)	Outcomes	Key results	Study weaknesses
Ruddy JM <i>et al</i> , 1972, Australia	4 year old ingested about 1000 mg imipramine, episode of PEA 1.5 hours duration	Case report	Cardiac status	Improved with 1 mg boluses glucagon	Case report Patient also received pyridostigmine, sodium bicarbonate, isoprenaline, digoxin, lignocaine and mannitol
Sener EK <i>et al</i> , 1995, UK	25 year old woman. Plasma toxicology - imipramine 3.0 mg/l, desipramine 0.18 mg/l, diazepam 2.9 mg/l, nordiazepam 2.2 mg/l, chlorpromazine 0.3 mg/l, temazepam 0.25 mg/l	Case report	Blood pressure Cardiac rhythm	No response to 1 mg bolus glucagon. 40 mm Hg systolic rise after glucagons No response to 1 mg bolus glucagon. Broad complex reverted to sinus after 10 mg bolus	Multiple drugs ingested in overdose Patient also received sodium bicarbonate, phenytoin and isoprenaline and fluid resuscitation
Sensky PR and Olczak SA, 1999, UK	36 year old OD-admission toxicology dothiepin 2.58 mg/l, desmethyldothiepin 0.51 mg/l, paracetamol 135 mg/l, diazepam 0.33 mg/l, nordiazepam 0.12 mg/l	Case report	Blood pressure Cardiac rhythm	No response to 1 mg bolus glucagon. 30 mm Hg systolic rise after glucagons No response to 1 mg bolus glucagon. Broad complex reverted to sinus after 10 mg bolus	Case report Multiple drugs ingested in overdose Patient also received n-acetylcysteine, adrenaline, noradrenaline, ephedrine, dobutamine, and aminophylline with fluid restriction