

## Other respiratory drugs

*Compound cough mixtures and cold remedies* may contain a variety of opioids, antihistamines, and sympathomimetic and mucolytic agents. The management of opioid and antihistamine overdose is covered elsewhere. The various sympathomimetic agents cause acute behavioural disturbances including visual and auditory hallucinations as well as features of  $\alpha$  and  $\beta$  overactivity. These may require specific treatment in the form of sedation or sympathomimetic blocking agents, or both. Chronic use of these drugs may cause behavioural disorders and hallucinations which remit on withdrawal of the drug.

*Anticholinergic drugs*—Agents such as ipratropium bromide are being used increasingly in the treatment of asthma. When administered by inhalation these have a wide safety margin, but accidental or deliberate self-poisoning with nebuliser fluid may cause pronounced anticholinergic poisoning. There have been a few reports of paradoxical bronchoconstriction after both aerosol or high dose nebulised anticholinergic compounds. The reaction to the aerosol is thought to be an allergic response, but the reaction to the nebulised solution may be due to inhalation of a non-isotonic solution.

*Corticosteroids* are occasionally taken in acute overdose but toxic effects are unlikely.

*Sodium cromoglycate* is of low toxicity and overdose needs no specific treatment.

*Antituberculous drugs*—Isoniazid overdose in the UK is relatively unusual, but several serious cases have been reported in the USA, particularly among Eskimos and North American Indians. It is occasionally abused for its hallucinogenic effects. Acute ingestion of over 6 g is associated with severe toxicity and mortality. Maintenance of a patent airway and control of convulsions are of paramount importance. Pyridoxine (1 g intravenously for every gram of isoniazid ingested or 5 g in 50 ml intravenously at 15 minute intervals until convulsions are controlled) has been reported to produce a significant reduction in mortality. Suitable preparations of pyridoxine are available (see previous article on emergency drugs). The value of active elimination techniques such as dialysis and haemoperfusion is unknown. Pyrazinamide may cause liver damage when used in treatment, particularly in patients with a history of liver disease; similar toxicity may occur in acute overdose. The management of acute ethambutol and rifampicin overdose is supportive.

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Acute overdose of antituberculous drugs	
	Clinical features
Isoniazid	Coma Convulsions Respiratory distress Metabolic acidosis Hyperpyrexia Hyperglycaemia
Rifampicin	Bright red skin pigmentation Red discolouration of plasma and urine Liver damage
Ethambutol	Nausea Abdominal pain Fever Mental confusion Visual hallucinations Optic neuropathy

*Is it still considered necessary for doctors and nurses to wear face masks when attending women in the labour ward?*

This precaution is no longer taken during normal labour, but face masks are still used for special procedures such as operative delivery or inserting an epidural catheter. Years ago puerperal infection was a common cause of morbidity and even death after hospital confinement, and there was indirect evidence that droplet spread from attendants caused streptococcal puerperal infection.<sup>1</sup> Nowadays sepsis is less of a problem: although infection may still be a hazard to neonates, puerperal sepsis after vaginal delivery caused only eight maternal deaths in England and Wales during the last three year period for which figures are available. Furthermore, there is controversy over whether face masks alter infection rates in clinical practice. Most investigations of the efficiency of surgical masks have used bacterial counts on blood agar plates rather than infection rates among patients, and have shown that different types of mask differ in their ability to filter small particles.<sup>2</sup> There is, however, little confirmation that masks prevent clinical infection. In a British operating theatre masks were abandoned for six months without any increase in the rate of wound infection,<sup>3</sup> and a study in an American children's hospital failed to show that masks prevented attendants picking up respiratory infection from patients<sup>4</sup>—though spread in the opposite direction has not been studied. The surgical mask is a potent symbol of medical mystique and power.

There has been little research on the psychological effects of masks on either wearers or patients, but masked faces seem unlikely to reassure a woman in labour. Now that maternity hospitals are trying to establish a friendlier image the use of masks is being minimised, particularly as their clinical benefits remain unproved.—JAMES OWEN DRIFE, senior lecturer in obstetrics and gynaecology, Leicester.

- 1 Paine CG. The aetiology of puerperal infection with special reference to droplet infection. *Br Med J* 1935;ii:243-6.
- 2 Rogers KB. An investigation into the efficiency of disposable face masks. *J Clin Pathol* 1980;33:1086-91.
- 3 Orr NWM. Is a mask necessary in the operating theatre? *Ann R Coll Surg Eng* 1981;63:390-2.
- 4 Murphy D, Todd JK, Chao RK, Orr I, McIntosh K. The use of gowns and masks to control respiratory illness in pediatric hospital personnel. *J Pediatr* 1981;99:746-50.

### Correction

#### Do emergency tests help in the management of acute medical admissions?

An error occurred in this paper by Gerald Sandler (13 October, p 973). In the right hand column on p 975, two lines from the bottom, the number should have been £10m, not £42½m as stated.