

### What is already known on this topic

Premedication with steroids, antihistamines, and other drugs, alone or in combination, is widely used before injection of iodinated contrast media

Premedication is thought to reduce the risk of life threatening anaphylactic reactions

### What this study adds

Life threatening anaphylactic reactions due to iodinated contrast media are rare

In unselected patients, the usefulness of premedication is doubtful as a large number of patients need to receive premedication to prevent one potentially serious reaction

Data supporting the use of premedication in patients with a history of allergic reactions are lacking

original reports; we cannot rule out selection bias. Most of the reported symptoms were clinically of minor importance. Curiously, grade 1 and grade 3 reactions were significantly reduced but grade 2 reactions were not. However, use of arbitrarily defined composite outcomes may not be appropriate.<sup>9</sup>

Contrast media that are used today may have a more favourable risk profile than the tested iodinated contrast media. In a large scale survey,<sup>6</sup> severe reactions occurred in about 0.2% of patients with high osmolar iodinated contrast media and in only about 0.04% with low osmolar non-ionic contrast media. Finally, the average quality of these trials was limited, and low quality trials are prone to bias, which could lead to an overestimation of the effect of a treatment.<sup>10</sup>

### Arguments for and against premedication

An argument in favour of premedication is that serious non-fatal anaphylactic reactions may contribute to major morbidity, prolonged hospital stays, and excess cost. Arguments against premedication include the cost and the risk of doing more harm than good to the patients. Although an oral double dose steroid regimen may not be expensive, a large number of patients need to be treated for one to benefit. Radiological interventions may be delayed by prolonged drug prophylaxis. Pretreatment may create a sense of security among people who inject contrast media. Healthcare providers may neglect measures to survey patients and to treat anaphylaxis. Finally, the drugs used may cause harm.<sup>11</sup>

### Conclusions

A large number of patients need to receive an oral double dose of methylprednisolone to prevent a potentially life threatening, iodinated contrast medium related reaction in one of them. For antihistamines, limited evidence shows that they may prevent some reactions. Valid data supporting the efficacy of premedication in patients with a history of allergic reactions are completely lacking. Severe allergic reactions due to contrast media seem to be rare. Physicians using iodinated contrast media could be trained to recognise and treat anaphylactic reactions appropriately.<sup>12 13</sup> Radiology departments should be staffed with equipment for resuscitation.<sup>14</sup> Physicians dealing with patients receiving contrast media should not rely on the efficacy of premedication; routine prophylaxis should be abandoned.

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### Corrections and clarifications

#### *On a mission: how Cuba uses its doctors abroad*

In this News article by Sara Carrillo de Albornoz we slipped up with the name of the editor of the Cuban public health journal *Revista Cubana de Salud Publica* (*BMJ* 2006;333:464, 2 Sep). We gave his name as Luis Carlos Da Silva, whereas it is in fact Luis Carlos Silva.

#### *Waits for diagnostic tests threaten 18 week treatment target*

We mixed up our royal colleges in this News article by Caroline White (*BMJ* 2006;333:463, 2 Sep). Dr Gill Markham is a vice president of the Royal College of Radiologists [not Pathologists] and also dean of its Faculty of Clinical Radiology.

#### *Filler: bmjupdates+*

The results given in *bmjupdates+* about black cohosh (*BMJ* 2006;333, 19 Aug, doi:10.1136/bmj.333.7564.0-e) were wrong owing to an author error in the original paper (*J Clin Oncol* 2006;24:2836-41). The correct mean reduction in hot flush scores was 15% (95% confidence interval 2% to 29%) for black cohosh and 31% (18% to 44%) for placebo.

#### *Editor's choice: Whither medicine?*

In this piece by Fiona Godlee we said that Roy Porter died "before the beginning of the new millennium" (*BMJ* 2006;333, 9 Sep, doi: 10.1136/bmj.333.7567.0-f). We were wrong; he died in 2002.