

Details of 43 minor adverse events associated with 34 407 acupuncture treatments, all reported as “significant” by practitioners

| Minor adverse events | No of occurrences | Descriptions |
|--|-------------------|---|
| Severe nausea, actual fainting, severe dizziness, heavy sweating, and vomiting | 12 | 5 cases of severe nausea (2 with feeling faint, sweating, and dizziness; 1 started next day and lasted several days; 1 started 4 days later with angina and nose bleeds); 4 fainted (2 with nausea and dizziness); 1 severe dizziness and feeling faint; 1 heavy sweating and slight needle shock; 1 vomiting after treatment |
| Unexpected, severe, and prolonged aggravation of existing symptoms | 7 | 1 difficulty walking the next day because of stiff, painful legs; 1 increase in shoulder pain for 20 minutes; 1 neck and shoulder pain increase for 1 week; 1 morning sickness worsened; 1 diarrhoea in patient with colitis; 1 constipation in patient with irritable bowel; 1 temporary aggravation of neck pain |
| Prolonged and unacceptable pain and bruising | 5 | 3 local pain at site of needling; 2 heavy bruising |
| Psychological and emotional reactions | 4 | 1 emotional outburst and anger at practitioner; 1 feeling of panic with sensation of heat and sweatiness; 1 intense emotional release, feeling manic, relaxed, rage, and confusion; 1 depression with anxiety |
| Avoidable errors | 3 | 2 forgotten needles; 1 moxibustion burns at 2 points |
| Miscellaneous symptoms | 10 | 1 haematuria next day; 1 headache next day; 1 unwell, tired, sore throat, breathless, and achy; 1 knee went weak and patient could not stand on it; 1 very tired next day; 1 felt sick and exhausted; 1 severe drowsiness; 1 tiredness next day with 10 hours of diarrhoea; 1 rash after taking herbs; 1 rash developed on abdomen a few days after treatment |
| Unspecified | 2 | |

Practitioners were asked to give details of any adverse events they considered to be “significant,” including any event that was “unusual, novel, dangerous, significantly inconvenient, or requiring further information.” There were no reports of serious adverse events, defined as events requiring hospital admission, leading to permanent disability, or resulting in death (95% confidence interval 0 to 1.1 per 10 000 treatments). Practitioners did, however, report 43 minor adverse events, a rate of 1.3 (0.9 to 1.7) per 1000 treatments. The most common events were severe nausea and fainting (table). Three avoidable events—two patients had needles left in, and one patient had moxibustion burns to the skin—were caused by practitioners’ errors.

Participating practitioners recorded 10 920 mild transient reactions occurring in 5136 treatments, 15% (14.6% to 15.3%) of the 34 407 total. Some local reactions at the site of needling were reported—mild bruising in 587 (1.7%) cases, pain in 422 (1.2%) cases, and bleeding in 126 (0.4%) cases. Patients experienced an aggravation of existing symptoms after 966 (2.8%) treatments, 830 (86%) of which were followed by an improvement, possibly indicating a positive “healing crisis.” The most commonly reported mild transient reactions were “feeling relaxed” in 4098 (11.9%) cases and “feeling energised” in 2267 (6.6%) cases, symptoms that often indicate an encouraging response to treatment.³

Comment

In this prospective survey, no serious adverse events were reported after 34 407 acupuncture treatments. This is consistent, with 95% confidence, with an underlying serious adverse event rate of between 0 and 1.1 per 10 000 treatments. This conclusion was based on data collected over a four week period by one in three of the members of the British Acupuncture Council. Even given the potential bias of self reporting, this is important evidence on public health and safety as professional acupuncturists deliver approximately two million treatments per year in the United Kingdom. Comparison of this adverse event rate for acupuncture with those of drugs routinely prescribed in primary care suggests that acupuncture is a relatively safe form of treatment.⁵ Further research measuring patients’ experience of adverse events is merited.

Contributors: HMacP initiated the project, coordinated the study, and is the guarantor. KT and MF contributed to the study design, interpretation of results, and drafting of the manuscript. SW analysed the data and assisted with the interpretation of results. The study was adapted from a survey design developed by Adrian White and colleagues. Alan Bensoussan, Stephen Birch, Alan Breen, Roy Carr-Hill, and Adrian White provided valuable comments on a draft protocol.

Funding: The study was supported by a grant from the British Acupuncture Council.

Competing interests: None declared.

- 1 British Medical Association Board of Science and Education. *Acupuncture: efficacy, safety and practice*. London: Harwood Academic Publishers, 2000.
- 2 House of Lords. *Complementary and alternative medicine*. London: Stationery Office, 2000. (Report of the Select Committee on Science and Technology.)
- 3 MacPherson H. How safe is acupuncture? Developing the evidence on risk. *J Alternative Complementary Med* 1999;5:223-4.
- 4 Eypasch E, Lefering R, Kum CK, Toidl H. Probability of adverse events that have not yet occurred: a statistical reminder. *BMJ* 1995;311:619-20.
- 5 Trammer MR, Moore RA, Reynolds DJM, McQuay HJ. Quantitative estimation of rare adverse events, which follow a biological progression: a new model applied to chronic NSAID use. *Pain* 2000;85:169-82. (Accepted 23 May 2001)

Corrections and clarifications

Systematic reviews of evaluations of diagnostic and screening tests

In this article by Jonathan J Deeks in the series “Systematic reviews in health care” (21 July, pp 157-62), several errors appeared in figure 2. The numerators for specificity (right hand panel) should have been labelled as false positives [not true negatives]. The sensitivity point estimates for Nasri(b) and Taviani should be 1.0, and the specificity point estimate for Goldstein should be 0.41 [not 0.6]. We apologise for introducing the errors in the positioning of these points.

This Week in the BMJ

Although in the text of the summary of Lam and colleagues’ article about smoking related deaths in China (*This Week in the BMJ*, 18 August) we acknowledged that Hong Kong is now part of China, we failed to publish a title that reflected this. We should have said “mainland China” [not just China].

Why a 1940s medical committee should not be forgotten
We wrongly described Geoff Watts, the author of this news article (18 August, p 360), as the presenter of *Medicine Now*; this radio programme is of course no longer broadcast. Geoff Watts now presents the Radio 4 science programme *Leading Edge*.

Medical Care Research Unit, University of Sheffield, Sheffield S1 4DA

Kate Thomas
deputy director

Sheffield Health Economics Group, School of Health and Related Research, University of Sheffield

Stephen Walters
lecturer in medical statistics

Correspondence to: H MacPherson
hugh@ftcm.org.uk