

## LETTERS TO THE EDITOR

- *The British Heart Journal welcomes letters commenting on papers that it has published within the past six months.*
- *All letters must be typed with double spacing and signed by all authors.*
- *No letter should be more than 600 words.*
- *In general, no letter should contain more than six references (also typed with double spacing).*

### Antibiotic prophylaxis in permanent pacemaker implantation

SIR,—We thank Aggarwal *et al*<sup>1</sup> for the interest they have shown in our recent trial of parenteral antibiotic prophylaxis in permanent pacemaker implantation.<sup>2</sup> They clearly do not like our message—that parenteral antibiotics should be prescribed routinely—which they feel conflicts with an earlier trial at their centre (Broadgreen)<sup>3</sup> which showed no benefit for parenteral antibiotics.

The Broadgreen trial randomised patients to parenteral antibiotics or not, but unfortunately did not include an antibiotic free control group.<sup>3</sup> All patients received antibiotic prophylaxis in the form of an antibiotic spray into the pacemaker pocket, whether or not they received parenteral antibiotics. Though the absence of additional benefit of systemic over local antibiotics in the Broadgreen trial may, if taken in conjunction with our data, suggest that local antibiotic prophylaxis is as good as systemic, this is not as good evidence as a trial against an antibiotic free control group. We agree with Aggarwal's colleagues' suggestion (first made in their paper in 1984<sup>3</sup>) that prophylactic local antibiotics should be tested within a prospective controlled randomised study. We look forward to seeing these data.

We were surprised at Aggarwal and coworkers' assertion<sup>1</sup> that our data did not

support our conclusions. This is not the case. To reach their position Aggarwal *et al* have performed several unusual manipulations on our results. First they retrospectively altered our trial end points by removing patients with sterile erosions from the analysis. Though we have presented data suggesting that non-infective erosion occurs,<sup>4</sup> our prospectively defined end point for this trial was re-operation for septicaemia, pocket abscess, or erosion. We chose re-operation as a solid end point, necessary in a non-blinded trial. Interestingly, even with this post hoc change in the analysis, the benefit of antibiotic prophylaxis remains statistically significant.<sup>1</sup>

Second, Aggarwal *et al* criticise our exclusion, at the operator's discretion, of many patients with temporary wires. Whereas this prevented us from reaching a meaningful conclusion in this subgroup, it has no effect on the significance of the overall result. Aggarwal and co-workers present non-randomised audit data of patients with temporary wires, a proportion of whom received parenteral antibiotics (against unit policy) in addition to local antibiotic prophylaxis.<sup>1</sup> We congratulate them on the low infection rate in both groups of patients but, in the absence of a randomised step, it is impossible to give a reason for it. The efficacy of antibiotic prophylaxis in patients with temporary pacing electrodes in place remains unproven and we will continue to use parenteral antibiotics in all such patients while we await prospectively randomised, controlled data.

The Broadgreen group's third attack on our data is one that no trial would survive. They change our results. Clearly if the control group's event rate is reduced, a point would be achieved where significance is lost for any given population for any benefit in any trial.

To conclude, we reaffirm our original conclusion that our prospective randomised study showed a statistically significant benefit for parenteral antibiotic prophylaxis in permanent pacemaker implantation. We recommend its routine use.

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- 1 Aggarwal RK, Ramsdale DR, Charles RG. Antibiotic prophylaxis in permanent pacemaker implantation. *Br Heart J* 1995;73:392.
- 2 Mounsey JP, Griffith MJ, Tynan M, Gould FK, MacDermott AFN, Gold RG, Bexton RS. Antibiotic prophylaxis in permanent pacemaker implantation: A prospective randomized trial. *Br Heart J* 1994;72:339-43.
- 3 Ramsdale DR, Charles RG, Rowlands DB, Singh SS, Gautam PC, Faragher EB. Antibiotic prophylaxis for permanent pacemaker implantation: A prospective randomized trial. *PACE* 1984;7:844-9.
- 4 Griffith MJ, Mounsey JP, Bexton RS, Holden MP. Mechanical, but not infective, pacemaker erosion may be successfully managed with pacemaker reimplantation *Br Heart J* 1994;71:202-5.

## CORRECTION

### ACE inhibitors after myocardial infarction: patient selection or treatment for all? *HSJ Lindsay, AG Zaman, JC Cowan*

The authors of this article (*Br Heart J* 1995;73:397-400) misquoted a figure on page 397 (final sentence of second paragraph, right hand column). The corrected version should read... "This compares with a benefit of 21 lives per 1000 patients treated at a comparable time point in the AIRE study."

## NOTICES

The 1996 Annual Meeting of the **British Cardiac Society** will take place at the Scottish Exhibition & Conference Centre, Glasgow from 7 to 9 May.

The **16th Scientific Meeting of the International Society of Hypertension** will take place in Glasgow from 23 to 27 June 1996. For a copy of the main announcement, registration, and abstract forms, please contact ISH 1996 Meeting Secretariat, Conference Associates and Services International Ltd/THG Group, 4 Cavendish Square, London W1M 0BX, UK (tel: +44 171 499 0900; fax: +44 171 436 8309).