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## **LETTERS**

### **CLINICAL TRIAL DATA**

# The true lorcainide story

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In 1993, Cowley and colleagues reported a controlled trial of the anti-arrhythmic drug lorcainide in heart attack. Nine men allocated to the drug had died versus only one man allocated to placebo.

This trial had been completed in 1980. It was eventually reported when the authors saw that it could have provided warning of what, by then, had become clear—that anti-arrhythmic drugs were more likely to be lethal than helpful.

I often use this example to emphasise the importance of publishing all well conducted trials.<sup>2</sup> This report is included in the James Lind Library (www.jameslindlibrary.org) because it is a rare example of researchers commendably exhuming and reporting an unreported trial.

We know too little about why trials remain unreported, and care is needed in making judgments about who or what is to blame.<sup>3</sup> Because I wanted to know the story of the lorcainide trial in more detail, I asked John Hampton, senior author of the Cowley report, to write an account of the story. This has been published in the James Lind Library, 4 and here are some key passages:

"On completing our study we tried to publish our results. Full of enthusiasm we started with The Lancet and then tried two or three cardiology journals. The result was always the same—immediate rejection."

"At a coffee break in 1993, someone remembered our old lorcainide study and we realised that it was a perfect example of many of the failings of clinical trials. I suppose we had always felt that we had a moral duty to publish it . . . so we tried again, [and] again, the high-impact factor journals were not interested. It was perhaps as a final throw of the dice that we added the

words 'publication bias' to the title, and so finally found a home for the paper."

While continuing to press for publication of unpublished trials we need a better understanding of the various factors that can lead to non-publication. As it happens, many premature deaths would have been avoided had more attention been paid to systematic reviews of trials of anti-arrhythmic drugs published in the late 1980s.<sup>5-7</sup> Even without data from the lorcainide trial, these showed that anti-arrhythmic drugs were likely to be lethal, yet they continued to be used in practice and in further clinical

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- Cowley AJ, Skene A, Stainer K, Hampton JR. The effect of lorcainide on arrhythmias and survival in patients with acute myocardial infarction: an example of publication bias. Int J Cardiol 1993;40:161-6.
- Adams B. The pioneers of transparency. BMJ 2015;350:g7717. (2 January.)
- Goldacre B. Bad Pharma, Fourth Estate, 2012:11.
- Hampton J. Therapeutic fashion and publication bias: the case of anti-arrhythmic drugs in heart attack. JLL Bulletin: commentaries on the history of treatment evaluation. 2015 www.james lind library.org/illustrating/articles/the rapeutic-fashion- and -publication- bias-theorem and -publication - bias-theorem and -publication - bias-theorem - bcase-of-anti-arrhy.
- Antman EM, Lau J, Kupelnick B, Mosteller F, Chalmers TC. A comparison of results of meta-analyses of randomized control trials and recommendations of clinical experts JAMA 1992;268:240-8.
- MacMahon S. Collins R. Peto R. Koster RW. Yusuf S. Effects of prophylactic lidocaine in suspected acute myocardial infarction. An overview of results from the randomized, controlled trials. *JAMA* 1988;260:1910-6.
- Hine LK, Laird N, Hewitt P, Chalmers TC, Meta-analytic evidence against prophylactic use of lidocaine in acute myocardial infarction. Arch Intern Med 1989;149:2694-8.

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