Drugs and cardiovascular risk in inflammatory arthritis: another case of glucocorticoid-bashing?

I read with interest the meta-analysis by Roubille et al., especially for the adverse effects noted with glucocorticoids (GCs). The data appear to confirm the risk of GC, which is surprising in view of the stated objective to include evidence from clinical trials. In a recent meta-analysis of randomised controlled trials (RCTs) that I participated in, no increased cardiovascular risk was found in 66 comparisons and a total of 4831 patients.

However, the explanation is quickly found on careful inspection of the methods: the authors chose to exclude all studies reporting on <400 patients. No reason is given for this decision, but the result is to effectively exclude all RCTs of GC, as these are investigator-initiated trials that do not reach this size. This is confirmed in their figure 2D, which lists only observational studies on GC risk.

There are good reasons not to rely solely on RCTs for a good estimate of safety issues (relatively short exposure, selected population, low sample size), but there is no good reason to exclude these studies from a meta-analysis simply because they are perceived to be not large enough.

There are even better reasons not to rely solely on observational studies to get a good estimate of safety issues related to GC. Most, if not all, of such studies suffer from confounding by indication: patients with more severe and therapy-resistant rheumatoid arthritis and more comorbidities are more likely to be treated with GC, and thus more likely to experience adverse events which are then attributed to GC. Such confounding cannot be repaired by statistical adjustment techniques.

In all, this review unfortunately recycles flawed observational data, ignores data from RCTs and thus beats on the same old tired drum to bash GC. It does not help to answer the important unanswered questions on the real balance of benefit and harm, and the place of GC in our therapeutic armamentarium.

Given the problems noted above, answers to these questions will have to come from pragmatic trials of sufficient size and duration.

Maarten Boers
Correspondence to Dr Maarten Boers, Department of Epidemiology and Biostatistics; Amsterdam Rheumatology and Immunology Center, VUmc, Amsterdam 1007 MB, The Netherlands; eb@vumc.nl

Competing interests None.

Provenance and peer review Not commissioned; internally peer reviewed.

To cite Boers M. Ann Rheum Dis 2015;74:e33.
Received 5 February 2015
Accepted 6 February 2015
Published Online First 24 February 2015

REFERENCES
Drugs and cardiovascular risk in inflammatory arthritis: another case of glucocorticoid-bashing?
Maarten Boers

*Ann Rheum Dis* 2015 74: e33 originally published online February 24, 2015

Updated information and services can be found at:
http://ard.bmj.com/content/74/5/e33

References
This article cites 3 articles, 2 of which you can access for free at:
http://ard.bmj.com/content/74/5/e33#BIBL

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/