Did the subjects and the controls have the same disease?

The article by Roberts *et al*¹ is important because it points to potential occurrence of side effects due to paracetamol, some of which are life-threatening. However, we have some doubts about the conclusions because it is not certain that they really show the responsibility of the drug itself in the adverse events mentioned. Although the authors well define methodological limitations of the article, we think that they didn't take into account the main confounding factor.

The major confounding factor seems to be the reason of paracetamol use, since it is important to know whether the disease treated in the controls is similar to the one in subjects.

When rheumatic diseases are considered, we know that in rheumatoid arthritis, cardiovascular morbidity is higher than in general population, related to the disease activity.² In osteoarthritis, where long-term paracetamol use is commonly prescribed, the disease is usually associated with metabolic syndrome and decreased physical activity that lead to increased cardiovascular morbidity.³ In a later article, it seems essential to have a more accurate assessment of the comparability of the groups in terms of risk factors.

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