Letter by Naimer Regarding Article, “Duration of Treatment With Nonsteroidal Anti-Inflammatory Drugs and Impact on Risk of Death and Recurrent Myocardial Infarction in Patients With Prior Myocardial Infarction: A Nationwide Cohort Study”

To the Editor:

I read with great interest the article by Schjerning Olsen et al.,1 in which they demonstrated the apparent detrimental impact of nonsteroidal anti-inflammatory drugs on the incidence of cardiac events in patients with a previous infarct. Although an abundance of evidence confirms the harmful influence of the class effect of cyclooxygenase inhibitors on cardiac function and coronary vascularity, the authors assert further epidemiological support that short-term treatment too can have dangerous implications. However, the authors’ methods overlooked the need to correct for the bias created by preselection of an allocated population with inherent propensity toward cardiac morbidity compared with their control counterparts. Cardiac patients subject to overwhelming strains and stresses are more commonly those whose pain threshold frequently plummets to an extent that leads them to seek analgesic medication. A large body of literature supports the concept that individuals exposed to a greater burden of stress or in a state of vital exhaustion are prone to cardiovascular disease.2–5 Therefore, as a group, patients resorting to analgesic use, in general, will necessarily fall into a category deeming them more vulnerable to cardiac morbidity than others. The conditions leading to the treatment course may be those very reasons to eventually catalyze the onset of the cardiac events and not necessarily the pharmacological agents chosen to treat those conditions.

I would like to point out that the authors state in the Methods section, “All models were adjusted for age, sex, year of index hospitalization, concomitant medication, comorbidity, and socioeconomic status.” Nevertheless, the indications for the treatment chosen are not stated, despite the fact that they exist. Such complaints may not necessarily be major conditions even worthy of being listed in the patients’ charts.

I would like to suggest that the statement in the Discussion section, “control for confounding by indication, ie, that the patients taking nonsteroidal anti-inflammatory drugs were more prone to be sicker than those not treated with these agents, may not have been adequate.” Needs justification, because health states seemingly insignificant on classification may definitely influence the onset of nonfatal or even fatal cardiac events.

It would be interesting to validate this important aspect of research by correcting for these confounders. There is no doubt that this area of research is important, but the effects of nonsteroidal anti-inflammatory drugs are difficult to evaluate in an observational study.

Disclosures

None.

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References

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