Reviewer's report

Title: Management of acute chest pain: A prospective study from Norwegian out-of-hours primary care

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Reviewer: Staffan G Nilsson

Reviewer's report:

Thank you for letting me referee the manuscript Management of acute chest pain: A prospective study from Norwegian out-of-hours primary care. It is a truly observational, prospective study of the management of patients consulting for chest pain or equivalent symptoms in four out-of-hour clinics in Norway. The subject is interesting since chest pain is a common cause of consultation in primary care. Further, primary care organization and work methods differ substantially way between countries so it is interesting to elucidate Norwegian circumstances.

It is a setback that only 100 of 832 consultations were investigated through interviews due to lack of resources. A full investigation of all 832 patients or at least substantially more than 100 would give a firmer basis of assessment especially concerning the comparison between the NACA score and the red, yellow and green labeling.

Information about the 100 study patients is very scarce e.g. the duration of chest pain symptoms would be interesting to know. This information would also facilitate comparison with other studies.

Major Compulsory Revisions

Background, sixth paragraph: The authors state: The aim of this study was to investigate diagnostics and treatment of choice in patients with acute chest pain out-of-hours in Norwegian primary care.

We do not know if the chest pain was acute since there is no information on the duration of symptoms. We only know that the patients were calling out-of-hours. This should be clarified in this paragraph and also in the heading of the article. Since there is no information about the most important diagnostic instruments i.e. medical history taking and clinical investigation I think it is better to omit “diagnostics” and solely tell that the aim was to investigate the use of ECG, laboratory tests, severity of illness, the physicians’ decision on treatment and admittance strategies.

Methods, second paragraph: The only exclusion criteria mentioned is symptoms suggestive of mastitis. What about trauma and possible costal fractures? Were they included among study patients?

Methods, fourth paragraph: It seems as the NACA score was used only in the interview situation within two days after the investigation of the patient in the
out-of-hours clinic. Were the physicians familiar with the NACA score? Has the NACA score been used for scientific matters previously? The study would gain a lot if the reliability of the NACA score was tested.

Results: Table 2. In order to augment contrast between groups the comparison should be between included study patients (n=100) and other registered patients (n=732). As it stands now the group of 100 study patients are included among the group of all registered patients (n=832).

Discussion: There is a lack of method discussion concerning the NACA score. What are the strengths and limits with the use of NACA score for scientific purpose?

Minor Essential Revisions
Table 2. Description of statistic methods in the legend may be omitted and kept to section Methods.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests