Reviewer's report

Title: Quality of life and health care consumption in primary care patients with elevated serum calcium concentrations in - a prospective, case control, study

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Reviewer: María Salinas

Reviewer's report:

This is a very interesting study of an important topic that can be very useful in primary care setting. Just to find a hypercalcemia independently of its cause must alert the general practitioner to take special measures.

Major comments

However there is an important study limitation that authors must try to solve or at least to include in the study as the main study limitation. An elevated calcium concentration was defined as #2.56 mmol/l. It is well known that physiologic calcium is ionized calcium not total calcium, and hence hypercalcemia can never be defined through the use of total calcium. As referred in table I ionized calcium was measured in the second investigation. Why was not measured in the first investigation? Probably the authors did not have ionized calcium technology availability. However, in a previous study the authors refer that albumin was also measured. Why hypercalcemia was not defined through the use of calcium corrected per albumin? I'm pretty sure that some of the patients included in the study as hypercalcemic in fact they were normocalcemic. It could explain why in some occasions and parameters there were not significant dereferences between normo and hypercalcemic patients. If authors have at its disposal serum albumin results in the first investigation, it would be necessary to reclassify patients and recalculate study results in view of the new classification of hypercalcemic patients. If not, at least, it must be stated as the main study limitation that has to be taken into consideration in future author studies.

PTH is not showed in the first investigation. Was not measured in the first investigation? Ionized calcium requires a special technology and sample manipulation and that must be the reason. But PTH is surely been measured in every patient. It would be interesting to be included in table I.

Minor comments

Abstract: Include in brackets n=127, n=254

Figure 2 can be redundant to table 3.

Bibliography must follow guidelines

Level of interest: An article of importance in its field

Quality of written English: Acceptable
Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests