Reviewer’s report

Title: Predictors of gallstone composition in 1025 symptomatic gallstones from Northern Germany

Version: 1 Date: 21 September 2006

Reviewer: Ulf Gustafsson

Reviewer’s report:

General

The reviewer thinks this is an interesting study, which deserves to be published. It consists of analyses of gallstone composition from a big number of gallstone patients and gives important information about the gallstone disease. It seems well conducted and clearly written.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

The methods section:

How many was operated with cholecystectomy during the four years in the eleven hospitals, younger and older than 65? How high was the frequency of “answers and stones” from the study population younger than 65? Do you estimate that the missing patients differed from the studied patients with respect to gender and age? You have to give some information about these questions in the methods section. It is important information regarding possible collecting bias and necessary when interpreting your results and generalizing them the whole gallstone patient population.

Discussion section:

Your study procedure with patients returning their stones afterwards is of course a weakness in the study compared to a procedure where you collect consecutive gallbladder stones in the hospitals. According to this reviewer’s personal anecdotal experience (collecting gallstones from surgically removed gallbladders) the gallstones frequently disintegrate with time and loose their original shape, (turns into dust). Probably there is a sampling bias in this sense, maybe you have only received gallstones in return which has not disintegrated. Is there a reason to believe that the gallstones you received differ from those that were not returned to you? Are any of the “main composition types” of gallstones more fragile and thus underestimated in frequency in this study?

I would like a short comment on these collecting bias issues in the discussion. Do your gallstone analyses reflect the composition of gallstones in the total gallstone population younger than 65 years in Northern Germany?

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

“heterogeneous” or “heterogenous” instead of “heteroneous” introduction, page 3

“identify” instead of “idenitify” introduction, page 4

“Eightynine” and similar numbers should be written “Eighty-nine”

Page 3 “Many gallstones are silent, but symptoms and complications ensue in around 25-50% of cases,” Please add reference.

Discretionary Revisions (which the author can choose to ignore)

Page 3 “Many gallstones are silent, but symptoms and complications ensue in around 25-50% of cases,” Please add reference.
What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare that I have no competing interests