Reviewer’s report

Title: The overexpression of Sterol Carrier Protein 2 gene in patients of hereditary cholesterol gallstones

Version: 6 Date: 5 October 2010

Reviewer: Silvana Zanlungo

Reviewer’s report:

This is a good descriptive study in which authors analyze the hepatic expression levels of SCP2 in hereditary, non-hereditary and non-cholesterol gallstone patients. The most important contribution of this work is undoubtedly the analysis of human samples. The manuscript is the continuation of previous studies looking to analyze whether the expression of SCP2 may correlate with cholesterol biliary lithiasis in humans. The methodology for measuring SCP2 mRNA levels should be improved. The presentation of the manuscript could be improved. The English of the manuscript requires modifications. Figures can be improved to make them more informative and friendly.

Major compulsory revisions

I suggest changing your method for analyzing mRNA levels of SCP2 for a more quantitative method: semi quantitative methods that include competimer technology or Real Time PCR. This is a crucial point for this manuscript and is needed for make it stronger.

Minor Essential Revisions

Title

Please check if with or of is used for “patients of/with hereditary cholesterol gallstones”

Abstract

Improve English.

Introduction

Improve English. Change and update references for cholesterol gallstones, authors should use reviews instead of SCP2 specific references (for example for references 1 and 2).

Results

Improve English. For example, what does it mean “To explore the potential mechanisms of SCP2 gene”?

Figure 1: Improve English of the legend. Include liver or hepatic expression. Clearly indicate in the figure the significant differences. “SCP2 mRNA” in the y
axis should be “SCP2 mRNA relative levels (SCP2/GAPDH)”

Figure 2: Include liver or hepatic expression in the legend. Is this a representative Western blot? Were all samples analyzed by Western blot?

Figure 3: Y axis: bile lipid concentrations; x axis: Control instead of control

Discussion

Improve English and references cited. The paragraph that proposes different mechanisms for SCP2-mediated cholesterol increase in bile and lithogenicity is not well written and referenced.

**Level of interest:** An article of importance in its field

**Quality of written English:** Not suitable for publication unless extensively edited

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests