Reviewer’s report

Title: The exact time of collagen peak in bile duct ligated rat model

Version: 3 Date: 15 December 2010

Reviewer: Martin Hennenberg

Reviewer’s report:

This is an excellent and fundamental paper. The authors should be congratulated to their finding, that fibrosis in bile duct-ligated rats is transient, i.e. reverses spontaneously after 3 weeks. This contrasts 1) any situation in patients, where hepatic fibrosis is progressive and irreversible, and 2) countless studies performed by many investigators in the same animal model. In fact, it has been assumed to date, that hepatic fibrosis in patients and animal models progresses to cirrhosis, but does not reverse spontaneously as described in this manuscript.

Minor comments:

Title:

Please complete the missing words in the title: “… collagen peak in bile duct-ligated rats”, instead of the current version (“.. collagen peak in bile duct ligated”).

Probably “Time course of…”, instead of “The exact time of…..”?

Results:

4.1.: Please adapt formatting: subheading is missing!

It is hard to understand, how animals may loose or gain weight, when “there were no significant differences between the body weights of the groups”. Please comment.

4.5.: Please complete the missing words “The peak level of collagen was at the […] and of the third week and …”.

Discussion:

On p. 15, line 4-5 the authors state that recanalization of bile ducts may be a reason for spontaneous regression of fibrosis in their animals. As this shouldn’t occur at all in proper handling and in this animal model, this speculation should be deleted from the discussion.

Please complete the missing references: p. 13, last paragraph; p. 14, last paragraph.

Table 1:
Please replace the commas by dots.

Figures:

The assignment of figures to corresponding legends may be corrected. I think the current Fig. 2 corresponds rather to the current Fig. 1b in the legends. To my impression, this tissue resembles more to a micronodular, septic fibrosis, but less to a secondary, biliary fibrosis/cirrhosis with strong bile duct proliferation. Thus, it may be replaced by a more representative image. By the way, the green picture is also very nice. Is it liver?

In the remaining figures, the use of bar diagramms may be better than the current course diagrams. Importantly, p-values should be included in these figures.

The manuscript may require some language editing.

**Quality of written English:** Needs some language corrections before being published