Reviewer's report

Title: Influence of Ketotifen, Cromolyn Sodium, and Compound 48/80 on the survival rates after intestinal ischemia reperfusion injury in rats

Version: 1 Date: 13 March 2008

Reviewer: Igor Sukhotnik

Reviewer's report:

In the present study, the authors evaluate the effect of mast cell stabilizer, H2 blocker or mast cell degranulator on intestinal recovery and survival rate after intestinal ischemia-reperfusion in a rat model.

Major concerns:
1. A limitation of this study is that it is more illustrative than quantitative. Effect of described factors on intestinal recovery as well as on lung histology was only illustrative. The intestinal mucosal parameters (like mucosal weight, mucosal DNA and protein content, villus height, crypt depth, enterocyte proliferation, enterocyte apoptosis etc) were not measured. Most of the pictures do not provide any important information and should be omitted.

2. In my opinion, the paper suffers from insufficient data to fully examine the hypothesis or to draw conclusions. The conclusion that IR and treatment with CS and kotifen affect liver is based on evaluation of ALT and AST as well as their effect on myocard is based on evaluation of LDH and CK. This is not enough.

3. It is very difficult to explain a discrepancy between unchanged intestinal injury score and 50% mortality rate after 75 min of ischemia.

Minor concerns

Abstract
1. This is well-written.

Introduction
This section is generally well-written with logical development. A few changes suggested.

1. "Cordeiro and his colleagues" change to "Cordeiro and colleagues"

2. The statement: "The effects of administration of mast cell... on IIRI..." is unclear. Do the authors mean on intestinal recovery following IIRI or in preventing damage caused by IIRI?

Methods
1. Study design should be concentrated in one place. The statement that 48 rats are divided into IV groups is described in one section, the other statement about 120 rats that were divided into 5 groups are described in the other section.
2. Provide please reference for Chiu's method.

Discussion
The Discussion is a little rambling. Nevertheless, the overall message of the paper is important although the manuscript has insufficient data to fully draw the final conclusions.

1. Statement that intestinal mucosa is one of the best recovered organs in 24 hours after IIRI is doubtful. The recovery requires usually 48-72 hours.

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, the manuscript does not need to be seen by a statistician.

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