Reviewer's report

Title: Inflammation and Enhanced Nociceptive Responses to Bladder Distension Produced by Intravesical Zymosan in the Rat

Version: 1 Date: 10 October 2005

Reviewer: Margaret A A Vizzard

Reviewer's report:

General
This manuscript by Randich and colleagues examines nociceptive responses to bladder distension produced by intravesical zymosan. The studies are novel and present the foundation for future studies utilizing zymosan-induced bladder inflammation model. The studies are extremely well designed and are appropriately supported by statistical analyses. There are a few areas in need of clarification.

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

Abstract. In the methods section, the first sentence is unclear and could be broken into two sentences for clarity.

Background section. Some statements in the background section should be supported by references:

Sentences beginning
1. Mycotic infections, such as those produced...
2. Zymosan is a mycotic...
3. Zymosan can be viewed as a...

Methods section. It is presumed that solutions administered into the bladder were done so under anesthesia to prevent elimination due to voiding reflexes. A statement to such should be added.

What is the justification for administering rats ampicillin? What is the justification for sectioning the vagus nerve during carotid manipulation?

Some raw examples of changes in EMG or ABP with bladder distension should be presented.

A discussion of what bladder pressures constitute non-noxious or noxious stimulation should be presented. This is relevant because it would support a finding of allodynia or hyperalgesia with zymosan-induced bladder inflammation.

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

Figure 1, panel 1. It is unclear to this reviewer what the open triangle and circle represent.
Hour is sometimes abbreviated as h or hr in the text and figures. Please be consistent.
Distension is sometimes written as distension or distention. Please be consistent.

Discretionary Revisions (which the author can choose to ignore)

**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.

-Margaret Vizzard