

Accepted Manuscript

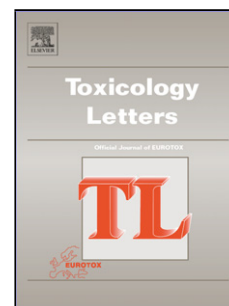
Title: Acoustic stress induces long term severe intestinal inflammation in the mouse

Authors: Silvia Miranda, María Estela Roux

PII: S0378-4274(17)31153-0
DOI: <http://dx.doi.org/doi:10.1016/j.toxlet.2017.07.898>
Reference: TOXLET 9911

To appear in: *Toxicology Letters*

Received date: 6-3-2017
Revised date: 2-7-2017
Accepted date: 30-7-2017



Please cite this article as: Miranda, Silvia, Roux, María Estela, Acoustic stress induces long term severe intestinal inflammation in the mouse. *Toxicology Letters* <http://dx.doi.org/10.1016/j.toxlet.2017.07.898>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Acoustic stress induces long term severe intestinal inflammation in the mouse

Silvia Miranda and María Estela Roux

Universidad de Buenos Aires. CONICET. Instituto de Investigaciones Cardiológicas (ININCA), GlycoImmunoBiology Laboratory. Marcelo T. de Alvear 2270. Buenos Aires. Argentina.

Address for correspondence:

Dr. Silvia Miranda. Instituto de Investigaciones Cardiológicas ININCA (CONICET-UBA). Marcelo T. de Alvear 2270. Ciudad Autónoma de Buenos Aires (C1122AAJ). Argentina. smiranda@ffyb.uba.ar Fax number: +54-011-4508-3888. Phone number: +54-011-528-52775

Highlights

- AS can trigger a severe intestinal inflammatory process in healthy mice
- IL-17 tissue expression predominates during the acute response to AS, followed by that of IL-22
- TNF- α tissue expression mainly increases during the late and chronic response to AS.
- AS induces damage and proliferative foci (CCL25+Ki67+) in the intestinal lining
- Noise might be harmful to humans by generating or aggravating inflammatory bowel diseases.

Abstract

The influence of noise on the presentation and progression of inflammatory bowel diseases has been poorly analyzed. We designed this study to investigate immediate and late effects of acoustic stress (AS) on small intestine. To this aim, CBA/J, BALB/c and DBA/2 mice were divided into AS and control groups. AS mice were exposed to noise (300Hz-70dB) during 24hs and randomized into: A) Acute effects group: mice were killed after AS; L) Late effects group: mice were killed 3 weeks after AS and O) Over-exposed effects group: mice were submitted to AS once a week during a month and killed. Small intestine sections were histologically examined. The expression of

Download English Version:

<https://daneshyari.com/en/article/5562016>

Download Persian Version:

<https://daneshyari.com/article/5562016>

[Daneshyari.com](https://daneshyari.com)