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Images in hepatology

# Effect of S-Nitrosoglutathione (GSNO) added to the University of Wisconsin Solution (UW): Mast cell degranulation during normothermic reperfusion

Alejandra B. Quintana;[1] Joaquín V. Rodríguez;[2] Henrique L. Lenzi;[3] Edgardo E. Guibert[4]

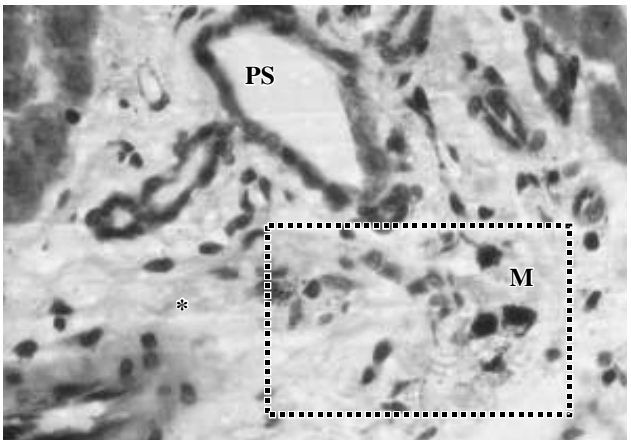


Figure 1A.

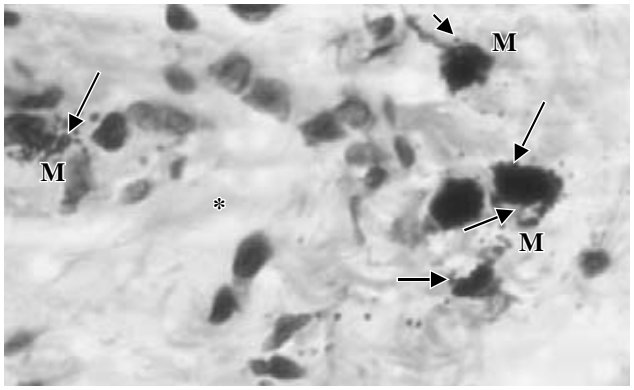


Figure 1B.

*Morphology of portal mast cells in rat liver after cold preservation/normothermic reperfusion:* Rat livers were cold preserved (0ºC) during 48 h in UW solution with the addition of 500 μM GSNO to improve liver preservation. GSNO is a S-nitrosothiol, which releases the vasodilator Nitric Oxide that acts on hepatic microvascular system protecting the liver from preservation/reperfusion injuries. Apart from hepatocytes and non-parenchymal cells, the resident cells, such as mast cells, appear to be involved in the pathogenesis of these injuries. Any increment in oxygen-free radicals induces mast cell degranulation and these alterations promote granulocyte infiltration during graft reperfusion *in vivo*.

Rat liver slices were stained with Giemsa of Lennet. Mast cells (**M**) were observed granulated and incremented in number and size in portal spaces (**PS**) that showed interstitial edema (*), after normothermic reperfusion *(Figure A)*.

*Figure B* showed a magnification of the area delimitated with the rectangle in *Figure A*. In this picture, interstitial edema (*) and red granules of secretion around mast cells (arrows) can be seen.

Damages on mast cells were avoided replacing the concentration of 500 μM GSNO for one of 100 μM.

[1] Morfología, Departamento de Ciencias Fisiológicas.
[2] Farmacología, Departamento de Ciencias Fisiológicas.
[3] Departamento de Patología, Fundação Oswaldo Cruz (FIOCRUZ), Río de Janeiro, Brasil.
[4] Biología Molecular, Departamento de Ciencias Biológicas, Facultad de Ciencias Bioquímicas y Farmacéuticas, Universidad Nacional de Rosario, Suipacha 531 (S2002LRK) Rosario, Argentina.

Address for correspondence:
Dr. Edgardo E Guibert, Biología Molecular, Dto. Cs. Biológicas, Fac. de Cs. Bioquímicas y Farmacéuticas, UNR. Suipacha 531 (S2002LRK) Rosario, Argentina. PHONE – FAX: 0054-341-4804601. E-mail: eguibert@fbioyf.unr.edu.ar