

50. Drinking style of myocardial infarcted rats: A proposal for fluid restriction prescription for patients with chronic heart failure

Can Zheng¹ Meihua Li² Masaru Sugimachi², Takayuki Sato¹

¹ Department of Cardiovascular Control, Kochi Medical School

² Department of Cardiovascular Dynamics, NCVS

Objective: Patients with chronic heart failure (CHF) are often recommended a fluid restriction of daily consumption. As little is known about the fluid demand style of CHF, there are no guidelines for the optimal drinking pattern. We investigated drinking behavior in normal and CHF rats.

Methods: Coronary artery occlusion in 8 weeks old rats was used to cause CHF. Either normal or CHF rats were raised in standard cage. A real-time monitoring system was used to record water consumption of individual animals.

Results: There were no significant differences in daily water consumption between normal and CHF rats. However, CHF rats drank at longer intervals than normal rats.

Conclusion: The results suggest that CHF may be blunted for sensing osmotic changes. Drinking at a frequent interval may be beneficial for homeostasis.

