## EXHALED NITRIC OXIDE CONCENTRATION IN PATIENTS AFTER HEART TRANSPLANTATION

P. Nadziakiewicz<sup>1</sup>, P. Knapik<sup>1</sup>, M. Zakliczyński<sup>2</sup>, M. Zembala<sup>2</sup>, E. Urbańska<sup>1</sup>, and J. Pacholewicz<sup>2</sup>

<sup>1</sup>Department of Cardiac Anesthesia, Silesian Center for Heart Diseases, Zabrze, Poland; <sup>2</sup>Department of Cardiac Surgery and Transplantology, Silesian Centre for Heart Diseases, Zabrze, Poland; <u>nadzial@poczta.onet.pl</u>

Nitric oxide (NO) is present in exhaled air in humans and its level may decrease in heart diseases. In the present study we prospectively investigated how heart transplantation treated with oral immunosuppresive drugs based on ciclosporine A influences the exhaled NO concentration (eNO). The study was performed in 17 patients after heart transplantation at various times after the procedure and in 15 non-smoking healthy volunteers as a control group. The patients after heart transplantation were free of clinical signs of rejection. End-tidal concentration of eNO was measured by the use of a chemiluminescence method. We found no significant differences in the eNO level between the heart transplant patients and healthy controls (6.81 : 2.70 ppb in the transplant group *vs.* 6.01 : 3.43 ppb in the control group). We conclude that heart transplantation and immunosuppresive therapy, in themselves, do not influence the exhaled NO concentration.