

Use of Sildenafil in the Evaluation of Candidates for Heart Transplantation

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Dear editor,

We would like to salute the authors of the article published in the *Arquivos Brasileiros de Cardiologia*, Vol. 99, No. 3, in September 2012, under the title of Sildenafil vs. Nitroprussiato de Sódio Durante Teste de Reatividade Pulmonar Pré-Transplante Cardíaco (Sildenafil vs. Sodium Nitroprusside

During Pulmonary Reactivity Test Before Heart Transplantation). While studying and discussing the article, we came across the following question: considering the results obtained in the study, would it be recommended the use of sildenafil instead of sodium nitroprusside in the evaluation of patients with pulmonary hypertension candidates to heart transplantation?

Keywords

Nitroprusside / analogs & derivatives; Heart Transplantation; Hypertension, Pulmonary.

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Reference

1. Freitas AF Jr, Bacal F, Oliveira Júnior Jde L, Fiorelli AI, Santos RH, Moreira LF, et al. Sildenafil vs. nitroprussiato de sódio durante teste de reatividade pulmonar pré-transplante cardíaco. *Arq Bras Cardiol.* 2012;99(3):848-56.

Reply

We would like to thank the colleague's commentary and point out the relevance of his question about our article Sildenafil vs. Nitroprussiato de Sódio durante Teste de Reatividade Pulmonar pré-transplante cardíaco (Sildenafil vs. Sodium Nitroprusside During Pulmonary Reactivity Test Before Heart Transplantation). In fact, the acute administration of sildenafil reduces efficiently the pulmonary hypertension of patients candidates to heart transplantation, without, however, promoting arterial hypotension or hemodynamic instability¹. However, the adoption of such routine would demand that the patient stay for more time in the hemodynamic room where the pulmonary reactivity test is routinely performed, which could render the method impracticable, only because of logistic matters. In the Instituto do Coração de São Paulo (São Paulo Heart Institute), sildenafil has been used during the pulmonary reactivity test in the following situations: 1 – patients with

borderline systolic arterial pressure (85 to 95 mmHg); and 2 – patients who don't show significant reduction of pulmonary artery pressure with sodium nitroprusside.

Another important point to highlight is: the use of sildenafil during the acute reactivity before heart transplantation is useful to define which patients are considered as responding to phosphodiesterase type 5 inhibitor². This occurs because the rate of patients that don't present pulmonary dilator response to PDE-5 inhibitor may be of 20% of the cases, which would render its use not viable in the handling of postoperative right ventricular dysfunction.

Regards,

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Fernando Bacal and further co-authors.

References

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