

# PSYCHOPHARMACOLOGY IN HEART TRANSPLANTATION

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## INTRODUCTION

Heart transplantation is a potentially life-saving procedure for people with terminal cardiac disease and it is considered the treatment of choice in cases of severe cardiac insufficiency refractory to medical or surgical treatment. The period between being listed for transplantation and receiving a heart is often particularly difficult and very stressful. Rates of psychiatric morbidity of around 50% have been found in these patients, mainly depressive and anxiety disorders. Psychopharmacological treatment is also very common, but no conclusive quantitative data are available. [1], [2]

## PURPOSE

Describe the psychopharmacological treatment profile and make an approach to the most commonly used drugs, of patients in waiting period for heart transplantation. The secondary objective was to describe the cardiological and psychiatric features of these patients.

## METHODS

Descriptive analysis of 125 adult patients enrolled between 2006 and 2013 in heart transplant program of Hospital Clinic of Barcelona, during waiting list phase. We analyzed the following variables: age, sex, years of disease progression, etiology of cardiopathy, axis I disorders applying structured clinical interview for DSM-IV and Hospital Anxiety and Depression Scale (HADS), and description of psychopharmacological pattern. We used descriptive statistics such means, averages and percentages.

## RESULTS

### Demographic and clinical characteristics:

On average, the 125 patients of the sample were aged  $55.47 \pm 10.9$  years. 98 were male (78.4%) and 27 female (21.6%). The mean of cardiac disease progression was  $9.86 \pm 8.2$  years. The main etiologies of cardiopathy were ischemic cardiomyopathy (41.6%), non-ischemic cardiomyopathy (28.8%) and valvular cardiomyopathy (12%).

### Psychopharmacological treatment profile:

A 31.2% of the sample (39 patients) was treated with psychopharmacological drugs at time of inclusion in waiting list, with this distribution: Benzodiazepines 16%; Selective Serotonin Reuptake Inhibitors 6.4%; Selective Serotonin Reuptake Inhibitors + Benzodiazepines 5.6%; Serotonin-Norepinephrine Reuptake Inhibitors 1.6% and other antidepressants 1.6%. No patient received treatment with antipsychotics or mood stabilizers. (Figure 1)

### Psychiatric evaluation:

Axis I diagnoses were present in a 30.4% of patients of the sample, all of them included in depressive, anxiety, sleep and adjustment disorders. The mean score of HADS was 11.52 (SD = 6.3), with a mean score of 6.54 (SD = 3.8) in anxiety subscale and 4.97 (SD = 3.3) in depression subscale.

## CONCLUSIONS

About one third of patients in waiting list phase showed an axis I diagnosis and received psychopharmacological treatment, mainly anxiolytics and antidepressants. Selective Serotonin Reuptake Inhibitors was the most used group of antidepressants (used in 12% of the sample, 15 patients), may be due to positive profile of side effects and metabolic interactions in heart transplantation patients. The clinical characteristics of our sample are similar to the overall patient profile integrated in a heart transplant program. [1], [3]

## REFERENCES

- [1] Zipfel S, Schneider A, Jünger J, Herzog W. Anxiety, depressive symptoms and heart transplantation. In: Molinari E, Compare A, Parati G, editors. Clinical Psychology and Heart Disease. Italy: Springer, 2010; pp. 149-163.
- [2] Triffaux JM, Wauthy J, Bertrand J, Limet R, Albert A, Ansseau M. Psychological evolution and assessment in patients undergoing orthotopic heart transplantation. Eur Psychiatry, 2001;16(3):180-5.
- [3] Stehlik J, Edwards LB, Kucheryavaya AY, Benden C, et al. The Registry of the International Society for Heart and Lung Transplantation: 29th official adult heart transplant report - 2012. J Heart Lung Transplant, 2012;31(10):1052-64.

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Fig. 1: Psychopharmacological treatment profile of the sample

