Chapter 9

Anxiety, Depressive Symptoms and Heart Transplantation

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Introduction

For patients suffering from terminal heart failure, orthotopic heart transplantation has become an established means of treatment. So far, over 50000 heart transplantations (HTx) have been performed in 271 transplantation centres around the world. It has been demonstrated that 1-year survival rates are over 80 percent; the mean survival time for HTx-patients has reached nearly 10 years, with a consecutive yearly mortality rate of 4 percent [1]. As a consequence, an increasing number of patients are reaching a long-time survival of more than 10 years [2, 3].

Given that the acute surgical and immunological problems of the transplantation procedure have been largely resolved, interest in the psychosocial implications for the patient and his or her immediate environment has intensified. A number of studies have shown a considerable improvement in quality of life after successful heart transplantation [4, 5]. Nowadays psychological evaluation and psychotherapeutic counselling are integrated in most successful transplant programs.

Over the past 30 years or so, since the early days of transplantation medicine, a dramatic change in the perspective of psychosocial research in heart transplantation has been observed. In the early days, psychosocial research focused on acceptance of the transplanted organ [6]. The major research focus in this field now concentrates on the identification of particular stressors and coping strategies in different phases of transplantation.

The following chapters will focus primarily on anxiety and depressive symptoms in different phases of heart transplantation [7].
Waiting Period
Studies investigating psychosocial aspects of the pre-operative phase have demonstrated enormous distress on patients prior to the operation. During the waiting period, a majority of patients experience a marked worsening in their physical condition, and 30% of the patients die. The already-stressful situation for patients on waiting lists has grown worse in recent years due to the rising demand for organs and a coincidental stagnation or even decline in public willingness to provide them. As a consequence, the waiting period has lengthened and patient survival rate has decreased.

Kuhn et al. [7] described this particular phase as a “dance with the dead.” In cases where patients improve and stabilize, they often become ambivalent about whether their decision for HTx is too early; in cases where there is a rapid decline in their somatic condition, they worry about whether an adequate donor organ can be found in time. This ambivalence with respect to their own decision, as well as to the advice of their physicians, creates tremendous psychological stress for both patient and family members. In a cross-sectional study on HTx-patients on the waiting list, Magni and Bogherini [8] found that 35% of the patients studied suffered from anxiety disorders and over 20% suffered from marked depressive symptoms. Kuhn et al. [7] diagnosed at least one psychiatric disorder in 63.8% of their patients on the waiting list for HTx, and Lang et al. [9], in 48% of patients (Review: Zipfel and Bergmann [10]). According to DSM-IV [11], Trumper and Appleby [12] found clinically significant psychiatric symptoms in 39% of their patients waiting for a transplant. Major depressive episodes were the most frequent psychiatric disorder, followed by generalized anxiety disorders. In addition, Triffaux et al. [13] found that 18% of the patients in the sample of waiting patients they investigated had an axis-II-disorder (personality disorder). Bunzel [14] described the situation faced by these patients - i.e., hoping for someone’s death in order to get the donor organ - as very burdensome. From her intimate knowledge of HTx patients, she got the impression that a substantial number of the depressive, as well as anxiety, symptoms were motivated by such highly ambivalent feelings. Studies focusing on the distress of the family members of HTx-patients show a high percentage of psychological distress [15]. At least a third of family members have reported that the waiting period resulted in a sustainable negative impact on their lives [16].

Because there has been a lack of reliable data on the course of depressive symptoms during the waiting period before HTx, we carried out a prospective study (Fig. 1) demonstrates that although patients shortly after being scheduled for surgery showed pronounced depressive symptoms (measured with the DS-scale by Zerssen [17]) compared with age matched controls, the level of depressive symptoms was further elevated to a clinically significant level after only four months on the waiting list.