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Avaliação psiquiátrica no transplante

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Descritores

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Abstract

The implementation of the presumptive donor law in Brazil is expected to increase the availability of organs for transplantation. As medical management of end-stage organ dysfunction continues to improve, increasing numbers of potential transplant recipients will be available to meet this supply. There is mounting evidence that supports the involvement of skilled psychiatric practitioners in the selection of transplant candidates. Data supporting the influence of psychosocial factors on compliance and therefore medical outcomes continues to grow. The literature review allows delineating the components and rationale for comprehensive psychosocial evaluations as a component of preoperative transplantation evaluation.

Resumo

A implementação da figura do doador presumido e as recentes mudanças na regulamentação do transplante no Brasil irão aumentar a disponibilidade de órgãos no País. O avanço no cuidado de doentes portadores de insuficiência grave de órgãos, por sua vez, irá aumentar a demanda por esses mesmos órgãos. Há considerável literatura apoiando o envolvimento de psiquiatras no processo de seleção dos candidatos ao transplante. Pesquisas mostram que fatores psicossociais influenciam na adesão ao tratamento e, conseqüentemente, no prognóstico desses pacientes. A partir de uma revisão da literatura existente, articula-se os componentes e lógicas de uma avaliação psicossocial abrangente, propondo sua inserção na avaliação pré-operatória dos pacientes para o recebimento de órgão.

INTRODUCTION

Brazil's reintegration of psychiatric and medical services in the general hospital has been reviewed in recent years.⁷ Programs such as solid organ transplantation, where costly scarce resources are provided to a limited number of recipients represent a particular area where psychiatric involvement could be exceedingly valuable.

The recent implementation of the presumptive donor law is expected to increase the availability of organs for transplantation in Brazil. The number of patients in need of transplantation will likely also grow along with the problems inherent in individuals with chronic medical conditions. The proposal is that transplant programs develop interdisciplinary teams to participate in the selection of patients who will be compliant with life sustaining treatment after transplantation.

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The importance of psychosocial involvement in candidate selection is generally recognized in transplantation programs in the United States and elsewhere.³⁴ Earlier surveys^{27,34} documented that 100% of responding liver transplant programs and high percentages of other organ transplant programs use psychosocial assessments as a component of candidate selection criteria.

Ongoing psychiatric involvement in transplant programs is supported by the high rates of psychiatric comorbidity seen in individuals with end-stage organ dysfunction. Rates of depression range from a point prevalence of 20%¹⁸ to 45%³⁸ in heart disease patients. Craven⁹ examined a consecutive series of applicants for lung transplantation and found that 50% reported a history of psychiatric disorder. Trzepacz et al⁴⁹ found that 20% of liver transplant candidates had concomitant adjustment disorders and 4.5% had major depression; 9% met the criteria for alcohol abuse or alcohol dependence, and 2% met criteria for abuse of other substances. Of patients undergoing dialysis, major depression has been described in as few as 5%⁴² and as many as 22%.³¹ Rundell's³⁷ work demonstrated that individuals seen in a transplant setting differ from those seen in general hospitals and are more likely to have psychiatric issues.

A growing body of literature links significant neuropsychiatric side effects to cyclosporine, tacrolimus, and other elements of the transplant regimen.^{1,3,4,6,10-13,16,17,21,24-26,30,35,43,47-48,51-54} These effects are often more pronounced in individuals who have demonstrated preoperative difficulties.

Potential roles for a mental health team lead by psychiatry in a transplantation program are listed in Table 1. The present article is meant to highlight the psychiatric aspects in the assessment of candidates for transplantation, and articulate a framework for the performance of such an evaluation. Many of these areas are supported by Freeman et al²⁰ who previously delineated the potential roles for a psychiatrist on a transplantation team.

Table 1 – Potential roles for a psychiatrist in a transplant team.

1. Candidate selection
2. Counseling
3. Treatment of personality and other psychiatric disorders
4. Peri-operative assessment and treatment
5. Family adjustment
6. Staff issues around morbidity and mortality

Psychiatric assessment

The role of a comprehensive psychosocial evaluation in transplantation selection is to define an

individual's risk factors for having difficulty in the post-operative period while recognizing their strengths. A detailed psychiatric assessment (Table 2) is generally completed after the initial medical screening and prior to the completion of all necessary physiologic testing for the transplantation. There is increasing evidence that psychosocial factors are associated with post-transplantation noncompliance and morbidity. Substance abuse history, personality disorder, and global psychosocial risks were associated with compliance problems.^{14,19,39-40} There is also evidence documenting that the number of rejection episodes after cardiac transplantation were linked to global psychosocial risks.⁸ Experienced psychiatric practitioners are able to identify individuals who are at an increased risk of having compliance difficulties over time, and alert the team about the steps to be taken to minimize this risk.

Table 2 – Psychosocial evaluation of patients for transplant (House,²³ 1993).

- Patient profile: relationship, educational, work and legal history
- Organ failure: cause, complications, course, compliance with treatment
- Means of coping with illness, past and present
- Expectations of surgery, including fantasies
- Support: family, friends, church and employment
- Existing psychiatric difficulties and treatment plan
- Past psychiatric history
- Family psychiatric history
- Substance abuse history
- Mental status exam: consider neuropsychological tests
- Understanding of procedure and competence to sign informed consent

Assessment of compliance should include attention to patterns of adherence to appointments, medications, and medical advice, especially regarding the individual's ability to cease harmful habits such as nicotine and alcohol use. Additionally, the ability to incorporate dietary and exercise advice should be included here. Adopting a new diet or exercise habits are extremely difficult and speaks to the patient's motivation to adapt themselves to the rigors of transplantation.

In the pre-transplant period, one should also address the individual's understanding of the importance of strict adherence to a treatment plan as a way to maximize their survival in the post transplant period by keeping their "new" organ safe. Detailed review of the neuropsychiatric and general physical external effects of immunosuppressive medications should be mentioned to allow support and further explanation, if requested. The ability of a candidate to acknowledge and appreciate the potential for a negative impact of transplantation translates into their ability to incorporate the full spectrum of possibilities in the post transplant period.

The ability to acknowledge potential positive and negative aspects of transplantation is an essential component of competence. The need to assess competence arises in all procedures that involve risks, and transplant surgery is not an exception. To be competent to accept the procedure the patient needs to understand the medical need for such a procedure, the risks involved, the alternatives, and the risks involved in rejecting the procedure. Overall, medically ill patients do not show an increased risk of being unable of giving consent to the treatment.² However, the severity of the conditions requiring transplantation make the likelihood of disorders with consciousness impairment greater and therefore make the assessment of competence crucial. Table 3 lists factors, which potentially make an individual unable to render competent judgments. When subtle questions concerning cognitive status arise the clinician should obtain neuropsychological testing if the patient is stable enough to complete them.²³

Table 3 – Medical conditions which may significantly impair the ability of an individual to consent to transplantation.

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- Severe hepatic encephalopathy
 - Cardiogenic shock
 - Recent sudden death/Cardiac arrest
 - Hepato-renal syndrome
 - Uremia
 - Toxicity from necessary treatment (e.g. Lidocaine, Nitroprusside)
-

Psychiatric co-morbidity is another area that should be addressed in a complete assessment. There is no clear decision algorithm on how to weight the impact of mental illness in candidates for transplantation. The assessment of these patients is important and they should be given a comprehensive treatment plan aimed at modifying remediable problems. The individual's willingness and ability to attend to these issues and their ultimate ability to be compliant with treatment protocols should be the ultimate deciding factors in candidate listing decisions.

The literature shows mixed results in transplanting individuals with severe and persistent mental illnesses such as schizophrenia.^{15,41} Owen Surman⁴⁶ is a proponent of improving access to transplantation and has proposed that kidney transplantation is a better alternative than chronic dialysis for psychiatrically ill patients. Most literature on transplanting individuals with serious psychiatric illness is based on anecdotal reports.^{15,41}

Substance abuse is important because of its strong correlation with non-compliance and graft loss.²² Currently in the United States one third of end-stage

liver disease patients candidates for liver transplantation have alcohol abuse as an etiology.²⁹ The Beresford Algorithm⁵ emphasizes the importance of a careful diagnosis, recognition of alcoholism as a disease by the patient and their family, assessment of social stability factors, and evaluation for the attainment of commonly accepted predictors of long-term abstinence from alcohol. For alcohol abusers receiving liver transplantation, positive identification with non-drinking persons, good social support system, effective time structuring, and a smooth medical course are correlated with abstinence.³²

Social support is another factor associated with the transplantation outcome. In Brazil this assessment should involve not only family availability, but also organizations for self-support, and churches. A primary care provider should be assigned. His/her roles, including driving the patient to the hospital and doctors' appointments, assisting with medications and supervising the patient's overall well being, need to be explicitly discussed. The program of "health agents" – *agentes de saúde* – and family doctors, available in some areas of the country, should also be contacted to gather information regarding compliance with medical care and to have cooperation for assistance in the post operative period.

Motivation to undergo transplantation is an issue that the psychiatrist should assess to understand the candidate's reasons for pursuing this treatment. Unrealistic expectations and ambivalence may be a sign for potential problems in the post transplant period. It should always be determined if the individual is undergoing transplantation evaluation due to their own benefit, or if family members, employers, or other third parties with their own interests are coercing them.

The potential transplant candidate's coping strategies are generally reviewed. For some individuals who have developed significant physical limitations as a result of their end-stage illness, developing whole new patterns of behavior may cause significant stress and frustration. Self-destructive responses to stress such as alcohol consumption or denial should be addressed. Patterns of coping with stress and dealing with medical issues will generally continue unless interventions to change them are made.

In an attempt to encourage standardization and research, two rating scales have been developed that incorporate the variables described above in assessing psychosocial factors in transplant patients: the Psychosocial Assessment for Candidates for Transplant (PACT)³³ and the Transplantation Evaluation Rating Scale (TERS).⁵⁰ Each has been shown to be

inter-rater reliable and have a good predictive value in determining individuals at risk for poor outcome and noncompliance.³⁶

Psychosocial contraindications

The primary psychosocial reasons to reject a transplantation candidate are based on their inability to comply with medications and the rehabilitation treatment because of the increased risk of graft loss.²³ The significant risks and the exceedingly high costs of transplantation are such that psychosocial factors which negatively affect outcome need to be recognized. Where these exist and will likely prevent graft survival, programs should refuse listing these patients until the issues are addressed. Utilization of a behavioral treatment contract may allow the team sufficient time to discern if the patient may ultimately be able to cooperate and be successfully transplanted. Table 4 provides a list of absolute and relative contraindications for transplantation developed by Strouse & Skotzko.⁴⁴

Table 4 – Psychosocial screening criteria for solid organ transplantation (Strouse et al.⁴⁴ 1996).

Absolute contraindications:
• Active substance abuse
• Psychosis significantly limiting informed consent or compliance
• Refusal of transplant and/or active suicidal ideation
• Factitious disorder with physical symptoms
Relative contraindications:
• Dementia or persistent cerebral dysfunction if adequate psychosocial resources to supervise compliance are not available or of a type known to correlate with high risk of adverse neuropsychiatric outcome
• Non compliance with transplant system, unwilling to participate in necessary psychoeducational psychiatric treatment, including treatment-refractory psychiatric illness, such as intractable, life threatening mood disorder, schizophrenia, eating disorder, personality disorder

There is no consensus is the medical community about absolute and relative psychosocial contraindications to transplantation, with the exception of active or recent substance abuse. Most transplant psychiatrists insist that psychosocial factors should not be taken a priori as immutable, or as definitively precluding candidacy.^{45,46} Instead, factors once rigidly considered as absolute contraindications to transplant are best viewed as risk factors and as targets of aggressive intervention.

CONCLUSION

Recent changes in regulations determining the availability of donors in Brazil is expected to increase the potential number of transplantation recipients. There is consistent evidence documenting the role and importance of pre-operative psychosocial evaluations of transplant candidates. A comprehensive evaluation of individuals can clearly elucidate the individual's strengths and weaknesses and allows the necessary treatment to enhance compliance. It is imperative that psychosocial aspects be included in the overall evaluation of an individual's appropriateness for transplantation to provide the transplant team with a global view of the potential problems, which may be predicted in the pre and post-transplant periods.

Consultation liaison psychiatrists are exceptionally well suited to lead the clinical psychosocial assessment of transplantation candidates. In addition to diagnosis, assessment, and case formulation, the organ transplant psychiatrist should be skilled at formulating and implementing specific treatment programs. The usefulness and cost-effectiveness of liaison psychiatrist is also well established.²⁸ By bringing closer consultation liaison psychiatrists to transplant programs, the potential benefits for patients and providers are enormous.

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