Evaluation of psychiatric issues in renal transplant setting

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ABSTRACT

Chronic illnesses can cause wide range of personality and behavioral disorders and require appropriate evaluation. Poor patient compliance with prescribed medications and other aspects of management can affect the outcome towards undesirable situation. The setting of renal transplantation presents a broad spectrum of problems and consequences. People involved (patients, their families or treating physicians) have lifelong commitment with evaluation and implementation of measures towards resolving the issues. Psychiatric evaluation is part of this scenario, which starts with evaluation of organ recipient along with donor and family as whole, right from time of diagnosis of end organ failure to transplant and then lifelong. This review highlights common issues faced at different stages of this lengthy pathway.

Key words: Donor, psychiatric evaluation, recipient, renal transplant

Introduction

Chronic illnesses cause a wide range of personality and behavioral disorders. For many chronic conditions, poor patient compliance to prescribed medications and other aspects of management can adversely affect the outcome. Patients on hemodialysis or kidney transplant candidates face psychological problems that affect the medical course of the illness. The most frequent of these include depression, poor compliance with diet and medication. Sexual dysfunction is another major problem reported by these patients. Approximately, one-fourth of dialysis patients are depressed at any one time and 2.7% of transplant patients experience affective psychosis.[1] Body image problems may arise after transplant, which could be related to placement of the new organ or from the side effects of immunosuppressants, which they have to take life-long.

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A comparative study published in 1983 revealed that about 46% of the renal transplant recipients could be identified as psychiatrically impaired either by their scores on the General Health Questionnaire or by a history of prior psychiatric treatment.[2]

Renal transplantation, especially with live related organ donors, is connected with psychological implications for the patient and the family. This is a big undertaking on the part of treating physician's team, which, in an established unit comprised of surgeon, nephrologist, pathologist, radiologist transplant co-coordinator, dietician, and clinical psychologist. In view of the connection between mental and physical health, cooperation between transplant surgeon/physician and clinical psychologist should be initiated prior to assessing both the organ donor and the recipient. Lin *et al*. have described some practical guidelines to clinical interviewing for initial psychiatric assessment.[3]

Pre-transplant assessment of organ donor

The decision for donating an organ is difficult. It is important to determine the motivating factors which might

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be any of the following: An impulse triggered by powerful emotions such as the inability to bear the suffering of a loved one; a desired extension in relationship (e.g., donor wants to engage his/her offspring in marriage contract with children of the recipient); expected compensation in the form of property, wealth, or foreign country citizenship. In case of spouse as donor, if wife is donating to husband, there may be pressure by in-laws or societal pressure. Same considerations, albeit to different degree, apply if husband is donating.

Altruism is defined as the principle or practice of concern for the welfare of others. It is a traditional virtue in many cultures and a core aspect of various religious traditions though the concept of "others" toward whom concern should be directed can vary among cultures and religions. Altruism can be distinguished from the feelings of duty and loyalty; a motivation to provide something of value to a party who must be anyone but one's self, while duty focuses on a moral obligation toward a specific individual. Pure altruism consists of sacrificing something for someone other than the self with no expectation of any compensation or benefits, either direct, or indirect (e.g., receiving recognition in return for the act of giving).

Much debate exists as to whether *true* altruism is possible. The theory of psychological egoism suggests that no act of sharing, helping, or sacrificing can be described as truly altruistic, as the actor may receive an intrinsic reward in the form of personal gratification. The validity of this argument depends on whether intrinsic rewards qualify as "benefits" (Wikipedia).

In the situation of living-related organ donation, donor becomes center of attention of all the family members. Respect for donor is enhanced, and this person attracts admiration from the extended family, which raises the donor's self-esteem and satisfaction of self. Mother donors often perceive this act as giving rebirth to child. People sometimes perform altruistic acts because they feel good about it.

Whether decision to donate is taken voluntarily, with full awareness of all possible complications happening to donor or later to recipient, including the possibility of failing of graft, needs to be considered. As any of this factors i.e. failure of the graft, can lead to psychological disorders in donors, which can vary from simple guilt to anxiety (whether organ I have donated was imperfect, what will happen as I am left alone with one kidney, if my kidneys were not good what will be my own future, etc.) or frank depression. Other examples would be a situation where the recipient is enjoying excellent graft function and the donor suffers from a medical disorder which he/she relates to donating the organ. Worse still, the donor faces might social dilemma as in case of female donors, they might see problems in finding a spouse as in some countries of South-East Asia. Sometimes, married donors face problems in their spousal relationship after donating the organ though they have done the act in agreement preoperatively.

Another important factor is family dynamics: The distribution of family roles, family size, how strong are bonds between members of the family, who takes essential decisions, what has been the position of the donor in the family so far.

It is extremely rare that a potential donor taking the decision has been provided with all the essential information on the transplantation process, and thus, the donor's expectations from the treatment can be unrealistic.[4]

As already mentioned, the willingness to donate the kidney is often triggered by an emotional upsurge. Such declaration is often welcomed with enthusiasm and recognition by the other family members, including the recipient, which makes it impossible for the potential donor to change the decision. Withdrawing from the initial decision would involve the need to confront the disappointment and the feeling of being let down by the recipient, as well as fear of a negative feedback, from the other family members.

A talk with the psychologist aims to determine the nature of motivation of the potential donor and thereby determining the potential psychopathological disorders in future.

It has been observed that even if the decision taken by most potential donors is independent and spontaneous, almost all experience some kind of pressure, which can be generated by the behavior of the recipient, other family members, or from specific system of beliefs of the donor him/herself.

The motivation to donate the kidney is rarely "pure," but rather mixed in nature: A combination of a sincere desire to help and hidden motives and fears, which obviously do not make it less valuable. The decision on donating the organ to a member of the immediate family is a beautiful gesture; however, role played by psychologist is to recognize hidden motivation behind the declared knowingly altruist motivation. There are no standardized psychometric tests to get such information. Structured interviews have not been proven to be helpful either.

Thus the basic tools here are free interview, observation data, and clinical evaluation.

There has been reported gender disparity among donors with women found far ahead in donation than men.[5]

Pretransplant assessment of the recipient

An important concern is to assess whether the recipient is under pressure from the family members. Postoperative compliance is essential for long-term graft function. Strategies to improve compliance in dialysis and transplant patients are similar to other chronic conditions and include simplifying the treatment regimen, establishing a partnership with the patient, and increasing awareness through education and feedback.[6]

Factors associated with poor compliance in several studies are frequent dosing, patient's perception of treatment benefits, poor patient-physician communication, lack of motivation, poor socioeconomic background, lack of family and social support, and younger age, especially in case of children.[6,7]

Poor compliance is reported more in adolescents than in other age group recipients.[8] This may be for the simple reason that they are in the care free era of life.

While waiting for transplant, the psychological reactions the recipient undergoes are complex: tension while waiting to get a graft, need to stay in an unknown place among strangers, fear that donor can withdraw from the commitment to donate, and finally the procedure itself. Psychological disorders such as depression, panic attacks, generalized anxiety, social phobia, personality disorders, and anti-social personality can occur in end organ failure patients while they are waiting for transplant.

When doing pre-transplant assessment of the donor and recipient, psychologists should initially perform a proper cognition assessment and talk to donor in isolation, then with the recipient, and at the end with both the donor and the recipient present at the same time.

In our experience, the people who have donated their kidneys in the past have expressed definite confidence in the psychiatry team and have said that discussing the issues made it possible for them to take a free decision. A talk with the psychologist facilitates an honest exploration of the donor's own motivation and emotions. The psychologist, being a stranger, not involved in family relations, can help to see all the aspects of the situation in possibly most neutral way.

In fact, the psychologist's talk with the donor also serves the recipient since his insight into the real motivation of the donor helps the recipient to avoid the emotional dependence, and thus, protects him or her from possible unrealistic expectations of the donor.

One important group of recipients is adolescents. Posttraumatic stress symptoms are reported more frequently in this age group after solid organ transplant.[9] This group of recipients requires special handling by the psychiatrist as well as treating physicians during pre-transplant evaluation.

All recipients should be screened for drug abuse or excess alcohol ingestion, as both of these conditions can lead to poor compliance. In addition, intravenous drug abusers are more prone to different kind of infections.[10]

Post-transplant evaluation of recipient

Immediate posttransplant period is the period of the greatest tension. As soon as the recipient recovers from anesthesia, the immediate concern is whether or not the kidney has started its function. The stay in hospital can take unusually long, with no guarantee of keeping the graft in perfect functioning state. Each day of the stay in hospital is bothersome, since the only and the most important activity is waiting for the test result which would reveal whether the kidney has started to function. The patient's mood depends not so much on his or her real medical state but on its subjective interpretation by the patient.

This is the stage where consultations with the psychologist may be required as the patients are susceptible to emotional disorders (most often depressive and anxiety disorders). Frustration; often caused by prolonged uncertainty makes them aggressive, showing a demanding attitude, or refusal to cooperate with the hospital personnel.

Some patients concerned about the wound healing after the transplant despite the encouragement from the doctors are afraid to move out of bed and try not to make any movement that might harm the wound. Their fears are mostly connected with the newly received kidney.

The most poorly tolerated psychological burden by the recipient is a never-ending uncertainty about the future of the graft. Patients behave differently in dealing with such uncertainty, and it depends on the patient's personality, earlier ways of managing stressful situations, as well as social support and the skills of benefiting from such support.

Some cannot stop thinking about the graft; they keep on measuring the amount of urine produced, record their blood pressure, heart rate or blood sugar results, and make comparisons between the results. In fact, their life is never anxiety-free, and continuous focusing on the functioning of the body triggers an intense fear, which can lead to depression.

Another factor is the need of taking immunosuppressive drugs and its consequences in the form of side effects. Some show concern about physical change as placement of graft can cause disfigurement. Excessive hair growth, darkening of complexion, skin conditions, and increase in body weight are some of the adverse effects of most concern and can lead to mood changes.

End stage renal failure patients while on dialysis show deficient cognitive functions, an effect of uremic toxins on CNS. Posttransplant improvement in cognitive functions, especially memory has been reported previously;[11-13] another reason for which the patients before and after the kidney transplantation should undergo psychological evaluation.

Postoperative follow-up of donors

Some donors show depression and anxiety after the act of donation. Sometimes for genuine reasons of getting pushed apart at job or in society, as labeled "incomplete," female donors find difficulty in finding a suitable match for marriage. In other circumstances, they are affected by poor function of recipient's graft.

Recipients with failing graft

From the psychological point of view, living-related transplants are slightly different from deceased or unrelated donor transplants. In both situations, there is a feeling of disappointment; however, in the recipient of the kidney from a relative, there is an additional sense of guilt toward the donor ("wastage" of the received organ). There is the additional fear that may not support another transplant from within the family. In the case of unrelated donor transplant, which happens by purchasing the kidney, guilt is about wasting the money, breaking the law of state, and fear of strategy chosen for the second transplant. Patient, who undergone transplant in "privacy", often in anonymity, to avoid the facing court of law, have tough decisions to make. In case of deceased organ transplant, fear of a long wait for another graft causes anxiety. In many patients, who underwent dialysis before the transplantation, there is a fear of coming back to that burdensome procedure.[14]

With the uncertainty getting longer, bad mood and a sense of mental exhaustion, often generates the need for a consult with the psychologist. The psychologists are supposed to provide the patient with support, understanding and, an opportunity of discussing their current situation without hesitation. In the first phase of the contact, the patient should be given comfort of talking about his or her health, fears related to current health issues, and to be listened to, which clearly reduces emotional tension.

If the treating nephrologists are certain about renal graft rejection, the job of the psychologist is to prepare the patient mentally to come back to dialyses.

Conclusion

Renal transplantation is the best option for end stage renal failure patients and certainly provides better quality of life after successful transplant, but at the same time triggers numerous psychological implications.

For the recipient of the kidney transplantation, treatment is connected with long-term emotional stress, prolonged anxiety and the need to confront, and to deal with strong negative emotions.

Most frequent psychological conditions are anxiety and depressive disorders. Often, they will require specialist psychological treatment (psychotherapy) and psychiatric treatment (pharmacological treatment). For that reason, the transplant recipients require interdisciplinary care, which include psychologists and psychiatrists along with transplant surgeon, physicians, radiologists, transplant co-coordinators/social workers, and dieticians on the team.

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