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Psychological Screening of Potential Donors in a Renal Homotransplantation Programme

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Introduction

The first human renal homotransplantation was performed in 1936. Recently, with the introduction of improved immuno-suppressive techniques, this operation has been carried out on an increasing number of occasions. The first renal homotransplantation in South Australia was performed in February, 1965. The donor was related by marriage to the patient and was not consanguineous. The patient is still alive and at work sixteen months later (June, 1966).

Bearing in mind the medical dictum, "*primum non nocere*"—that whatever is done to another human being must not in any way be harmful, to select a donor, a complete physical as well as psychological assessment is essential. It is apparent that although a person might volunteer freely to give a kidney to a patient such an action might result in untoward psychological results of any magnitude at a later stage. The risks to the donor, in fact, are not only those of the immediate and late surgical sequelae, but also to his mental health.

Since the possibility of success of renal transplantation is improved if the donor is a blood-relative, and since between blood-relatives there exists a dynamic complex of psychosocial interactions, conscious and unconscious, benign and malignant, it is essential that these be explored. It is important also to exclude possible neurotic, affective or psychotic motivation. Therefore, at the outset it was decided that a complete picture of the psychological state and of the dynamics of the potential donor was necessary.

Review of the Literature

The National Research Council held a conference in Washington in 1963 to assess the results obtained from all over the world in places where transplantation had been carried out during the preceding decade. Two hundred and forty-four renal transplantations were reported. Of the 28 monozygotic twins who had received transplants, 21 were still alive. Of the 91 patients whose donors had been blood relatives, only 5 were alive after more than one year; while of the 120 patients who received kidneys from living but unrelated donors or from cadavers, only one had survived for more than one year. The most frequent cause of failure appeared to be rejection of the graft. It should be noted that the present drugs used for immuno-suppressive therapy had only just been introduced at that time.

Starzl (1964) and his colleagues from the University of Colorado Medical Centre reported 64 patients who had had living donor kidneys up to September of that year. Of these, 37, or 60 per cent., were alive at that time, and 18 were well after transplantation. All patients had been followed up for at least six months.

In 1965 the Transplantation Registry reported the percentage survival of recipients at the end of one year with donors being a monozygotic twin as 89 per cent., a related living donor 53 per cent., a cadaver 21 per cent. and unrelated donors only 12 per cent. Scribner (1964), in his presidential address to the American Society for Artificial Internal Organs, proposed that a new code of ethics was required to meet this new situation. He pointed out that the surgeon involved in this work has to decide which patient will be chosen and also whether the homografts should be obtained from the family or a friend, from anonymous volunteer donors, from cadavers or from publicly maintained organ banks. Leake (1964), in a thoughtful paper on the moral problems of organ transplantation, states that these are not the

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exclusive responsibility of physicians nor of biomedical scientists involved in this work, nor of the prospective recipients or donors. He believes society intelligently informed must make the final decision for the attainment of maximum social welfare.

Monnerot-Dumaine (1965) advocated that the candidates should be psychiatrically screened. Woodruff (1964), discussing the ethical problems in organ transplantation, sees the donation of a kidney as a purely voluntary act, but to cover the doctor the necessary conditions (although he doubts whether they are sufficient conditions) are to establish beyond reasonable doubt that the patient has gross renal failure which it is not possible to manage by other methods. The donor must be in good health; consent, which must be entirely voluntary, must also be the result of an informed opinion, and the chances of success must be good.

Hamburger, Crosnier and Dormont (1964) make two points about the living donor. Firstly, the doctor must respect the desire of one person to risk his or her life for another, and secondly he must be sure that the risk is very much less than the probability of success for the recipient. The two dangers to be avoided are the exertion of *undue* pressure on the potential donor, who must be healthy, emotionally stable and a genuine volunteer, and the risk with brain transplants (which are at present out of the question), of altering the spiritual and mental personality of the recipient. In another paper, Hamburger (1964) notes that the donor should be stable and have mature judgment, and he refers to the problem of the reaction of rejected donors, and also the effect on living donors if the transplant has been unsuccessful. Ayd (1964) reported to us a case where a woman who was profoundly depressed volunteered to be a donor in the hope that during the operation she would die and thus indirectly commit suicide. Nayman (1964), in a review of renal homotransplantation, touched on the donor problem and made several points on the risk to the mental well-being of actual donors, solicited donors and their families.

Once a transplantation programme is initiated in an area, and the public, through the medium of the popular press, gets to know of it, patients with chronic renal disease are regarded by their families as potential recipients. Even before transplantation is mentioned by the treatment team, it has often been discussed by the family who have selected likely donors. Those who refuse to co-operate risk being rejected by the family and are made to feel guilty. This results in family quarrels and estrangements. An editorial (*Ann. int. Med.*, 1964) quotes the case of one family torn apart as a result of the mother giving a kidney to her child against the wishes of the husband and father. Holmes (1964) observed that situations of familial ostracism can be created unless care is taken to avoid donor coercion, but he gives no details. Dunea *et al.* (1965), reporting their experiences of renal homotransplantation in 24 patients, note that close blood relatives served as living donors, and an unrelated living donor (brother-in-law) was used only once. No reference is made to psychological assessment of donors. They do comment, however, that donors with young children or having family responsibilities are to be avoided. Kemph (1966) has been impressed by the unconscious resentment of donors to recipients, but his small number of donors, although psychiatrically investigated, were not apparently excluded on psychological grounds from the transplantation programme. Since psychological evaluation is used in our programme as part of the final screening, it is for this reason that we report our experience.

Psychological Screening of Potential Donors

In this Unit the decision to consider a patient as a candidate for renal transplantation is primarily a medical and surgical one, but all potential recipients undergo psychological and psychiatric assessment. One of the senior members of the Unit discusses the realities of the situation with the patient and with the responsible next-of-kin. The facts are carefully explained, and these may have to be repeated so that those facing the problems are able to grasp them all. Most patients and relatives will remember only about a quarter of the information given in any interview, so that reiteration

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of unpleasant, unpalatable facts is essential for the development of an informed opinion. Included among the facts are the current world results. It is stressed that these really help little in predicting what may be the outcome of any one particular operation. No promises are made of possible length of survival, and it is emphasized that the procedure is probably only buying time, but that with the rapidity of advancement in this field this may be essential to the patient. To avoid all family pressures, it is pointed out that the Unit will screen all people who wish to be considered as donors, but the decision as to who that donor is to be is entirely the province of the Unit personnel.

To minimize time loss and expense, a "6-point fail" screening regime has been adopted, and the failing points include the more time consuming, expensive and possibly more hazardous investigations as one passes down the list. This 6-point assessment programme is as follows:

1. Blood group and explanation of the programme leading to nephrectomy.

2. History and physical examination, with blood tests, urine analysis, x-rays and electrocardiograph tests.

3. Specific tests of renal function.

4. Intravenous pyelogram.

5. Psychological and psychiatric interviews and assessments.

6. Aortagram and extended blood groupings.

Following successful completion of stages 1-4, the psychiatrist interviews the donor, usually on one occasion only. This interview lasts on the average 90 minutes, and its object is to discover the dynamic relationship to the patient and in particular any unconscious motives of a negative kind. Technically, the most desirable donors are blood relatives, but from the point of view of the psychiatrist these are the very people who will have the most ambivalent and complex attitudes towards the patient. It is also important to discover the potential donor's preferred pattern of ego defences, the adjustments he or she has made to life's stress periods, and whether neurotic or psychotic breakdown has previously been experienced. It is also essential to note the potential donor's commitments to other people and to be assured that these have been properly evaluated by him. It has been a remarkable experience to discover how obviously potential donors convey their ambivalence if one is prepared to listen.

For those donors who are unrelated by blood or marital ties, the psychiatric interview has to exclude any psychopathological motive of sacrifice or exhibitionism. The religious or altruistic motives given by potential donors who are distant friends or mere acquaintances of the patient have to be carefully evaluated for their depth of principle. The psychiatrist next refers the potential donor to the clinical psychologist, to obtain an objective evaluation. The psychologist tests for intelligence, ego strength, and degrees of neuroticism, and tries to formulate the resources of the donor. The battery of tests used includes the Wechsler Adult Intelligence Scale, the Rorschach, Cattell's 16PF, and the Hand Test. From these an objective measure of personality strengths and weaknesses can be built up and correlated with the clinical findings.

In selecting personality tests, it was thought valuable to use quantifiable material where possible, so the 16PF questionnaire was appropriate, but since culture and language problems sometimes preclude its use projective material was also included whenever time allowed. In retrospect, it is apparent that the most useful interpretations were derived from the projective situation. It was evident that donors were often motivated to distort the response on the questionnaire in order to create a favourable impression. Because of this, significant psychopathological indications did not always emerge. Projective material is less susceptible to manipulation.

The reports of the psychiatrist and of the psychologist are sent independently to the other members of the team. It is thought to be more helpful to them if the psychiatric testimony and the objective rating are presented independently. Any marked inconsistency of view is discussed by the group. The psychiatric evaluation is important in deciding to reject a potential donor on mental health grounds, and may also help to make a decision where there is more than one donor for a particular patient.

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Results

To date, 15 patients have been admitted to the transplant programme. Six of these have had the operation carried out. For these 15 patients, 65 potential donors have been examined. Twenty-five have reached psychiatric assessment. Of these 25, 12 were considered to be psychologically suitable; that is to say they gave no history of a past tendency to emotional disorder, they presented as well adjusted, well integrated personalities who had dealt soundly with their previous life stress situations. There was no hint of ambivalent attitudes to the patient, their responsibilities to others in their family circle appeared negligible, and they were not currently mentally ill. They understood completely the possible outcome of their act. Of these 12 people, 5 have so far undergone nephrectomy. Three await operation, while in one case the patient has died before transplantation could be attempted. For one patient, two potential donors were equally suitable, while in the twelfth case a suitable cadaver became available and was used.

Eight of the 15 patients had two or more potential donors who reached psychiatric assessment, while for 7 patients only one donor came to this stage.

The following five cases are selected examples of the histories obtained, and of the results of psychometric testing. They illustrate the reasons given for particular recommendations.

Case 1: The patient was a 31-year-old married man suffering from acute glomerulonephritis. He was an Italian migrant. The five volunteers were his two brothers, the wife of the elder brother, the patient's father-in-law and the patient's wife. The family group presented as their choice the younger brother aged 21, but he resolved the problem by approaching one of us confidentially and stating that he was too scared. This was not revealed to the rest of the family. The wife of the brother was unsuitable because of blood group incompatibility. The other brother interviewed was four years older than the patient. He was the second son in a family of five. The family had been brought up on the land and owned their own farm. The eldest son, for cultural reasons of land tenure, will inherit the farm, although he is not interested in farming. The potential donor wished to be a farmer. He considered he was his parents' favourite child because he was always the one who did messages for them. He was the one they relied upon to carry out the daily tasks and chores around the farm and to give help at inconvenient times. When discussing this he pointed to his heart and said "I have it here", and it became clear that his family role was that of donor. He was not as gay as his brother, the recipient or so carefree. Very often as a child and young man, the patient when asked to do something would refuse and say "John (the donor) will do it." John did, although he was aware of conscious resentment. He noticed that as time went on he was invariably asked first because he was soft-hearted, slow to anger and never refused.

For a time the patient and the potential donor farmed together in joint ownership. This was not successful; the farm was given up and the donor had to find a new type of job. Shortly after this he developed headaches; these were described as a "foggy feeling" in the head, and were associated with impaired concentration. "It's like a ball of lead rolling about inside the head." He had these headaches every two or three days, and consulted a psychiatrist for his symptoms. This preceded his brother's renal complaint by a number of years. Later he again referred himself to the same psychiatrist; this time in addition to the headache, he complained of abdominal pain associated with defaecation. This complaint coincided closely in time with the onset of his brother's kidney failure. It appeared that there was a flare-up of neurotic patterns of tension and anxiety related to his brother's illness.

The history indicated the presence of considerable hostility towards the patient. Ostensibly, the potential donor saw himself in the family as the one who did things for people. It was also a test of his personal courage. His personal responsibilities included a wife and a family of three, of whom the eldest was aged 10. Unconsciously, the real relationship with the patient was coloured by resentment and hostility. While the giving of a kidney might have been construed as expiation for these feelings, failure of the graft might equally have been interpreted as meaning that his sacrifice was not good enough and that he had killed his brother. This might have led to the loss of the kidney becoming a neurotic focus of pain.

The psychologist reported independently as follows. "He is within the average intellectual range, with an I.Q. around 90. Both projective tests (Rorschach, Hand) emphasize that he is at present operating in response to emotional pressures which are in excess of clear thinking. The Rorschach showed the presence of high anxiety, poor emotional control and fairly strong emotions almost certainly aggressive in flavour .... This is certainly not a cool, rational decision, but strongly influenced by duty."

The second potential donor was the patient's father-in-law, again an Italian migrant. He was a man of 56. His wife was 49, and his three children were all in their twenties and at work. His marriage was apparently happy and stable and he was a successful market gardener. He gave a history of bouts of occasional aches and pains, but on closer questioning these appeared to be related to swings of mood. The downward swing lasted from half a day to a week while the up swings when all was well and he was optimistic and outgoing lasted for long periods. He made it quite clear that he had no favourites among his children, and the impression was of a very secure contented family relationship. His motivation for giving a kidney appeared quite uncomplicated. He was doing this for his

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daughter's happiness because she had been a good daughter to him and the patient was a "good man, a good husband and father". Clinically he presented as a simple, honest man, mildly cyclothymic, but essentially stable. Because of language difficulties psychological testing was unsatisfactory. What seemed to emerge was "a fairly simple man, with an excess of bodily pre-occupation, perhaps indicative of poor adjustment".

On psychological grounds it was recommended that the brother should be rejected. The father-in-law however, in motivation, both consciously and unconsciously appeared straightforward. While there was a pattern of mood swings, it was judged that these were not of sufficient severity, depth or duration to be a source of future trouble. Family commitments were minimal.

This man successfully gave his kidney to his son-in-law in February, 1965. The patient is still alive and working after sixteen months. The donor was seen at follow-up a month after operation when he had returned home. He had been driving a tractor and doing other light jobs. He stated he felt "just right—just as before". His wife had noticed no change. He had a triumphal return to his own European village, and on follow-up sixteen months later he had no complaints either physically or mentally. He clearly had enjoyed his role of a hero to his own local community. He was back working full time at his job and more than satisfied that he had given his son-in-law, who has been working for most of that period of time, a longer lease of life.

Case 2: The patient was a single man aged 22, the eldest by 5 years of a family of four. His father had a history of heart disease and so was unsuitable as a candidate, but he suggested that his wife should volunteer. Right from the start of the interview the lady's ambivalent feelings were clear. "After all, I have a sick husband and three children. He is on a pension and I have to go out to work." (By stating that she had three of a family instead of four she seemed to have dismissed the patient.) Her lack of conviction about giving her kidney was very obvious, and her conversation was liberally sprinkled with words like "ought", "should" and "must". If anything happened, what would become of the others if I was unable to go out to work?" "What a waste it would be if it failed." Whilst she has been in conflict over this decision she has had symptoms of anxiety, early morning waking and bouts of crying.

The following facts emerged from her history. She was the youngest of five. Her father had been a chronic invalid "placid, he was just around the place, he occasionally did the potatoes for mother". He died of heart disease. Seven months later, and four days after her marriage at the age of 21 to a man ten years her senior, her mother died. She had known her husband for two months. She became pregnant a month after marriage, and just after this the husband, an Army sergeant, was posted overseas. She lived in the old family house with an elder sister who left to stay in another part of Australia a year after the patient was born. She then remained alone in the house with the baby and did part-time work. She was sick throughout her pregnancy, labour lasted 24 hours, she could not breast-feed the baby and he had three months colic. At 22 months, he had an appendicectomy for bowel trouble. She always found him difficult, not cuddly, always independent, exploring, defiant, a boy who kept everything to himself.

It was obvious that the potential donor had rejected the pregnancy and that she must have been considerably depressed throughout the first year or two of the patient's life, which would account for his difficult behaviour and his general sense of being unwanted. He had kept the knowledge of his kidney disease from her for as long as possible. When he had episodes of fatigue and she would find him lying on his bed, "I used to go crook at him and call him lazy". She expressed her anger at him for not telling her, and then said, in a very hostile tone, that he was at present behaving "like a little boy leaning on us".

The psychological report stated that her obsessionality and emotional stability scores were within normal limits. "16PF indications are healthy, though more typical of a successful male in our culture than for a woman—combination of decisiveness, control, foresight, together with an above-average intelligence and low tension. This is not the profile of a mentally disturbed person, but is the type of profile that one could hope for in a business administrator."

Because of her clear-cut ambivalence and the manner in which she conveyed it, it was strongly recommended that she be rejected although she was clearly stable in herself.

Case 3: This case represents a similar psychodynamic situation involving a father and son, where the son was the potential donor. The patient was aged 45 and was diagnosed on psychiatric examination as an introverted, depressive personality. The son was aged 25 years and was single. He gave his initial reason for wishing to be a donor as "Father has done so much for me, it was the normal thing to want to do." This was immediately followed by the phrase, "but I am very scared". He considered that his father was "highly strung and a worrier". The potential donor, who lives with his parents, had just bought a ski-boat which his father, the patient, thought a waste of money. "He is very thrifty. He gets irritable over trifles. He was strict when I was a child and after a quarrel he would not speak to me for a day or two." In describing his father's strictness to him as a child, he recalled an incident that he had never been able to forget. "I must have been about 10 or 11 and I had given a mouthful of cheek to mum. Father threw me out onto the lawn and kicked me on the back. I have never forgotten it." He described considerable parental quarrelling. He considered he was more like his mother in temperament. "I would do anything for her." Again, quite spontaneously and without any reference to what had been said before, he remarked in a detached way, "I feel with this kidney thing I am doing it for mum's sake." Later in the interview the potential donor said, "I will feel pretty lousy for not doing it. There is a chance it might not take. I want to get married; my wife might have kidney trouble and I could not give her my kidney then. If I had kidney trouble would something be done for

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me?" This last remark seemed to contemplate whether his father would give a kidney for him if the roles were reversed.

Further investigation revealed allegations of considerable punishment from the father, of marked phobias as a child, poor sleep and food fads. He under-achieved at school. Relationships with masters were only fair. "I was fed up with school." It was clear that schooling was important to his parents and that his father was very upset when he left school. "That's why he gets on better with my brother. He's at University." Asked if his brother had mentioned volunteering to give a kidney, he said "No, I don't think he would or could." His father was away on war service during his childhood, and he only saw him twice in the first eight years of his life. The impact of this strict, obsessional man, unable to show affection, on the small boy who had been brought up solely by his mother can be imagined. It was while discussing this period of his life that again an apparently inconsequential sentence was produced, "If the kidney did not take, I have wasted a kidney." Late in the interview he said that he had thought about kidney transplantation programmes and felt that the spare kidney should come from a cadaver. "It's a question of endangering two people's lives."

As a result of this interview, it was considered that the candidate was a potentially neurotic personality whose ambivalence to his father was so marked that if the transplant failed, the son's anger would be displaced on to the medical profession. This could mean the emergence of refractory psychogenic symptoms. It was accordingly recommended that he be rejected as a donor. Further evidence of his distaste for the whole proceedings was shown by his failure to keep appointments with the psychologist. When eventually he completed his testing, the psychologist commented as follows. "When seen face-to-face, his test results indicated emotional instability and some obsessional defences. His later record reflected a degree of tension and guilt-proneness, but overall a great deal of defensiveness was apparent. In view of his behaviour, I would feel that the unstable signs are the minimal indicators of more tension and ambivalence than he is prepared to reveal."

Case 4: A different type of difficulty arises in donor selection when the potential donor is not a member of the patient's family but is only a distant acquaintance. We have had some experience of donors presenting on altruistic grounds. They have heard through mutual friends of the difficulty the patient and his family may be in, have felt that the patient is doing or has done a wonderful job and so is someone whose life should be preserved if possible, because of his value to their community, or, more often, to his immediate family. One such person, a married man of 40 with no children, had met the patient's family socially on a number of occasions and was very impressed with them as a family unit. Before volunteering, he took the trouble to check his blood group and found that it was the same as the patient's. He was a man with good relationships to authority figures, and this allowed him to feel there would be no danger to him since he could be thoroughly confident of his medical advisers. In his time he had taken a course in animal physiology at the University and had learned of kidney function and that people could live very adequately on one kidney only. He used such phrases as "I am more scared of crossing the street that than I am of giving a kidney." He impressed clinically as being introverted, but appeared well integrated and stable. His father had been a strong figure who had marked social interests, and although his strongest identification was with his mother it was considered that there was a family pattern of public-spiritedness. He tended to intellectualize his motivation. He thought it was a good thing to do, but not a tremendous sacrifice. He had no religious views on it. He did not seek publicity, but believed on the other hand that the more people realized that this could be done in a relatively casual way the more donors would come forward. Neither clinical nor psychometric testing could fault him. Projective testing using the Rorschach and the Hand tests emphasized a lack of warmth and the presence of unsatisfied emotional needs. It was noted that he had a tendency to intellectualize responses, and it was thought that he was someone who was best when immersed in his work and provided he was able to continue this post-operatively there would be no contra-indications to his offer.

Transplantation was successful and the patient is alive and at work ten months later. At follow-up interview eight months after operation, the donor reported himself as 95 per cent. back to normal and at work. "To begin with on our return home the patient treated me as a small god and was over-enthusiastic as a friend. He will do anything I say and this is not right." The patient had been the centre of a great deal of interest and curiosity and had shown the donor off to an admiring public. Since the patient has had nearly a year of useful life the donor felt satisfied with his contribution. "I am egotistic in agreeing that kidney donors should be examined. My reward is seeing this man alive and well." For several months following operation he had been aware of a dull ache in his loin where the kidney had been, but this had cleared over the preceding months. There was also a little hesitancy of micturition. "But I know it is imaginitis." Since he has been one of the original Australian donors he feels that he ought to report every fleeting symptom of unease to his physicians so that they can profit by his experiences, and while this is important there may be dangers in preventing him forgetting that he has lost a kidney and so enhancing a hypochondriacal tendency. He was clearly disturbed at the symbiotic relationship that was developing with the patient and asked for help in handling the first anniversary of the transplant operation. He was asked at this follow-up interview whether the motives that had seemed to be valid at the original interview were in fact genuine, or whether he had hidden material deliberately in order to make sure he would be chosen. He was quite definite that he had been as frank as he could have been and that there was nothing he would add or subtract. It was considered that the experience had not been deleterious to this man.

Case 5: A difficulty in selecting donors from the psychiatric point of view is the need to anticipate possible

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long-term dangers to the candidate, especially at times of crisis, even although the immediate situation is sound.

One such example was a potential donor aged 25 who was the brother-in-law of the patient. He was married and had an eight-month-old son. His wife had given her approval; she had been a nurse and had apparently much faith in doctors. His parents, especially his father, were against the idea, believing that he was not strong enough. On history taking, it was found that over the previous eight months since his child was born he had had five episodes of cramping epigastric pain. Gall bladder disease and peptic ulcer had both been suspected. It was noted, however, that the potential donor and his wife in their pre-marital days had lived to the full extent of their incomes, so that when they married there was not enough money for their high standard of living. He developed gambling pursuits which added to his financial problems, and as he became deeper and deeper involved began to drink very heavily as a means of escape and as a means of reinforcing the denial of his difficulties. Basically he is probably somewhat cyclothymic, since alcohol in large quantities makes him either elated or morose, depending on his basic mood. However, not only did he drink but he was tempted to embezzle, and he lost his job and is on probation.

Psychological testing was as follows. "This man impressed as a quiet but solid sort of person. The Rorschach was at first rather limited, but progressed to being of good quality without any great originality. There seems a strong need for warm affection expressed in several Fc responses.

"The 16PF profile was a healthy one, especially with high ego strength and inner relaxation. Trustful, calm and confident are all appropriate adjectives."

His motivation, at a conscious level and from what could be judged unconsciously, appeared reasonable. The doubtful factors which did not show up on psychometric testing were his inability to cope with financial insecurity except illegally, and his recourse to heavy drinking when under this stress situation. It was thought that both these factors were indicative of personality weakness, and that they might be more operative in later life. Therefore, it was finally recommended that he be rejected, as the loss of a kidney could well act as a psychogenic focus in the future. Since the patient in this case has already lived just over two years on periodic dialysis the problem was not so acute.

General Comments

This section of the paper would not be complete without reference to some miscellaneous points of interest that have arisen. For one patient an unrelated donor offered himself. This donor had a young family and later it was discovered that his eldest daughter, a girl aged 16 had glomerulonephritis. She has now been transplanted, with her father as donor. The problems that this man would have faced had he been selected as donor to the previous patient do not require elaboration.

Another man has come to us since his daughter, one of a family of four, has nephritis. He wished to have his other children blood-grouped so that the donor could be selected many years ahead and ear-marked as it were for future sacrifice.

One patient recently has produced the interesting attitude that he feels diffident and rather ashamed to ask someone to give a kidney, and for his peace of mind he would much rather be able to buy a kidney from a potential donor. "Thanks seem so inadequate, it's an extraordinary relationship between someone who gives you a kidney and yourself." He realizes that the problem of buying a kidney for say, £5,000 from someone would be considerable, but nevertheless considers this would be a happier solution for him.

When this was put as a hypothetical suggestion to one of his potential donors the answer was a very firm rejection of the notion. "The idea of getting money for giving a kidney is quite abhorrent and disgusting. Even if it only gave him another six months of life I would feel it well worth it."

Results of Transplantation

Of the 15 patients, six have so far received kidneys from live human donors. Two failed and one of these patients died; the second patient is still alive having had a successful graft from a cadaver. Of the three patients whose grafts were successful all three are alive and at work, 16 months, 10 months and 8 months after operation respectively.

Two other patients in this group have just had a successful second transplant from cadaveric sources and have been discharged home.

All five living donors have been seen on follow-up from 4 to 16 months following operation. All donors reported that they were fit and well and that they had suffered no untoward effects of nephrectomy. One donor, the mother of the patient, was still in the mourning period following her son's death, but this mourning process was resolving normally and naturally when she was interviewed four months later.

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Discussion

It is hoped that these five representative examples will show clearly the standards laid down to protect the interests of the potential donor and his family. Indeed, the psychiatric interview usually opens with an explanation of its purpose in which the phrase that "we want to avoid finishing up with two patients, the original one and now the donor", is used. It is perhaps unfortunate that in selecting the cases to show how important dynamic factors are assessed, we may have implied that the psychological reports and the clinical impression disagree markedly. In point of fact there is a very high correlation between the opinions expressed by the psychiatrist and the psychologist. Where there has been divergence, the psychometric tests have not shown up patterns of familial interaction that were thought prognostically important by the psychiatrist.

In this programme, when potential donors are rejected they are told of the decision by the surgeon. They are not informed that the rejection has been on psychiatric grounds. This is in order to spare the feelings of the person; it is considered that rejection is more acceptable and involves less loss of face if the fault is ascribed to some minor physical variation, compatible with normal health as long as the person has both kidneys.

The point might be made that of all the patients and potential donors seen by the psychiatrist, forty in all, only one had previously required psychiatric help. This series has yet again shown how a so-called "normal population" can reveal so much psychopathology, which is yet consistent with reasonable good health and function until some particular stress situation exposes interpersonal difficulties.

The criteria we select for recommending a candidate are those which current clinical experience and theoretical understandings suggest are sound, reliable and valid. The decision whether to accept or reject a donor is not easily made. However, by constantly discussing our attitudes and our standards among ourselves and with our colleagues we try to avoid the Jehovah complex. We try to carry out this work as a carefully controlled therapeutic exercise. It is true that renal homotransplantation is still in the experimental stage but we have found that our patients and their families as well as the wider community accept this provided they are given the hard facts. By accepting the next on the waiting list whenever a bed is available, by being at all times factual, by conveying accurate reporting on success and failure rates, by being blunt about the risks involved and by being sensitive to and aware of the patient's deeper communications to us, we believe we can keep this work at a therapeutic level and minimize the moral and ethical tangle. We try to be aware of the feelings that are deeper than the superficial words the patient and donor uses, to be alert to the meaning of his behaviour and non-verbal communications, so that we can know as surely as possible what course the patient has decided for himself or herself and whether or not they will accept prolongation of life on the only terms which we are able to offer them at present.

Summary

An account is given of the psychiatric and psychological screening of potential renal donors. This paper is based on experiences with 25 such candidates for 15 possible renal homotransplantation patients. Five representative cases are given to show the criteria used for recommendation or rejection.

It is considered that psychiatric screening of potential donors is essential if undesirable psychological sequelae to operation are to be avoided.

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