

## **Information on Kidney Transplant**

### **Introduction**

Kidney transplant is the preferred treatment modality for most end stage renal failure (ESRF) patients. A kidney from a healthy person (usually a close relative) or a deceased donor is transplanted to the patient under general anaesthesia. Prior to transplantation, the patient and the donor shall go through all the blood and urine tests and medical examinations. If transplantation is successful, the patient will no longer need to undergo dialysis treatment but must take life long immunosuppressants to keep the body from rejecting the kidney.

### **Risks and Complications**

1. Surgical complications include:
  - (a) Wound infection
  - (b) Bleeding
  - (c) Leakage of urine
  - (d) Renal artery or vein thrombosis
  - (e) Stenosis of renal artery
  - (f) Stenosis of ureter
  - (g) Lymphocele
2. Dysfunctioning of transplanted kidney due to rejection.
3. Common and uncommon opportunistic infection from bacteria, fungus, virus and parasite, including those infection transmitted from donor during transplantation.
4. Recurrence of particular type of glomerulonephritis may adversely affect the function of transplanted kidney.
5. Immunosuppressants may increase the chance of developing certain forms of malignant tumors, including solid organ tumor and lymphoma.
6. The commonly used immunosuppressants(anti-rejection medicine) and their side effects are:
  - (a) Prednisolone - Side effects:
    - (i) Weakened immune system, hence more susceptible to infection (fatal if uncontrolled)
    - (ii) Moon face
    - (iii) Increased appetite
    - (iv) Weight gain
    - (v) Delayed wound healing
    - (vi) Skeletal damage
    - (vii) Elevated blood sugar level and Diabetes Mellitus
    - (viii) Increased blood pressure
    - (ix) Eye diseases such as glaucoma and cataract
    - (x) Peptic ulcer
    - (xi) Acne
    - (xii) Increased cholesterol levels
  - (b) Azathioprine - Side effects:

- (i) Weakened immune system
  - (ii) Hair loss
  - (iii) Liver damage
  - (iv) Bone marrow damage
- (c) Cyclosporin A - Side effects:
- (i) Weakened immune system
  - (ii) Hirsutism (increase facial hair growth)
  - (iii) Swollen gum
  - (iv) High blood pressure
  - (v) Increased cholesterol levels
  - (vi) Hand Tremor
  - (vii) Overdosage may affect kidney function

Other Agents:

- (d) Tacrolimus - Side Effects:
- (i) Weakened immune system
  - (ii) Headache, insomnia, hand tremor
  - (iii) Increased blood pressure
  - (iv) Elevated blood sugar
  - (v) Overdosage may affect kidney function
- (e) Mycophenolate Mofetil/Mycophenolate sodium - Side effects:
- (i) Weakened immune system
  - (ii) Nausea, vomiting and diarrhea
  - (iii) Bone marrow damage
- (f) m-TOR ( Rapamycin/ Certican ) - Side effects:
- (i) Weakened immune system
  - (ii) Increased cholesterol levels
  - (iii) Proteinuria
  - (iv) Poor wound healing
  - (v) Oral ulceration
  - (vi) Pneumonitis and pulmonary fibrosis

**Notes for Transplant Recipient**

1. The patient has to be stable emotionally and does not have serious heart or lung disease, cancer, mental disease, infection or any other serious incurable diseases.
2. In spite of the advances in medicine, there are still chances that kidney transplantation will fail.
3. Agree to undergo kidney transplantation and understand all the possible side effects of the transplantation and immunosuppressants.
4. The patient may have to receive dialysis treatment until the transplanted kidney begins to work properly.

5. The transplanted kidney may be removed because of rejection or infection. In that case, the patient will have to go back to dialysis treatment.
6. To monitor the progress of transplantation, the patient will have to undergo blood and other tests (e.g. imaging, graft biopsy). To achieve optimal results, the patient must follow the dietitian's advice on diet restrictions and maintain optimal body weight.
7. The patient must take anti-rejection medicine everyday and attend follow-up to adjust dosage of medication.
8. To avoid having side effects, when the patient seeks medical consultation from another doctor, he/she must show all the drugs including immunosuppressants to the doctor to avoid drug interaction.
9. Even though the transplanted kidney has been taken good care of, it may still lose its function. At present, the success rate for kidney transplantation is:
  - (a) living donor: 95% for one year  
85% for five years
  - (b) deceased donor: 90% for one year  
75-80% for five years

### **Post-Transplantation Matters**

The patient must inform the renal centre of the following:

1. Fever, chills
2. General discomfort
3. Swelling of the eyes or legs etc.
4. Decreased urine output
5. Sudden weight gain
6. Feeling of pain or swelling over the wound
7. High blood pressure
8. Burning sensation during urination
9. Passing blood in urine

There may be other abnormalities caused by infection. Should the patient feels unwell he/she must inform the health care professionals immediately or seek emergency treatment from hospital.

### **Remarks**

This is general information only and the list of complications is not exhaustive. Other unforeseen complications may occasionally occur. In special patient groups, the actual risk may be different. For further information please contact your doctor.