

## **Information On Long-Term Hemodialysis Treatment (CHD)**

### **Introduction**

There are two types of dialysis for End Stage Renal Failure (ESRF), peritoneal dialysis and hemodialysis. After renal assessment, suitable patients will be placed on long-term hemodialysis treatment.

### **The Procedure**

A permanent vascular access is necessary. A special blood vessel known as an arteriovenous fistula will be created on the patient's arm. To perform hemodialysis, the health care professionals or a trained member from the patient's family home hemodialysis) will insert two needles into the arterialized vein. The patient's blood will be drawn from one needle and goes through an artificial kidney where metabolic wastes and excess fluid are removed from the blood. Cleaned blood will return to the patient's body through the other needle. Each hemodialysis takes 4-6 hours to complete. The patient has to undergo hemodialysis for 2 to 3 times a week in the renal centre or at home (in-home hemodialysis).

### **Risk and Complication**

#### **Adverse reactions and Complications**

- |                                |          |
|--------------------------------|----------|
| 1. Hypotension                 | (20-30%) |
| 2. Cramps                      | (5-20%)  |
| 3. Nausea And Vomiting         | (5-15%)  |
| 4. Headache                    | (5%)     |
| 5. Chest Pain Including Angina | (2-5%)   |
| 6. Back Pain                   | (2-5%)   |
| 7. Itchiness                   | (5%)     |
| 8. Fever, Chills               | (<1%)    |
| 9. Haemorrhage Tendency        |          |

#### **Uncommon Risks with Serious Consequences**

Disequilibrium syndrome, allergic reaction to the artificial kidney and/or blood lines, cardiac arrhythmias, cerebral haemorrhage, convulsion, hemolysis, air embolism, cardiac arrest and sudden death.

#### **Before the Procedure**

Before being accepted into the CHD programme, patients must agree on the followings:

1. The patient has to agree for long-term hemodialysis and understand the possible complications of the treatment.

2. The treatment is essential in maintaining the patient's life. The patient must follow the health care professionals' advice and instructions and receive treatment according to schedule.
3. To achieve optimal results, the patient must follow the advice of dietitian or other health care professionals on diet restrictions.
4. A functioning arteriovenous fistula is necessary for the hemodialysis procedure. Repeated operation will be needed if the fistula is not working well.
5. Know how to take care of the arteriovenous fistula and acknowledge the risk of bleeding.
6. If patient shows signs of anaemia during the course of treatment, blood transfusions or other treatment may be needed.
7. According to the medical condition of the patient, the renal centre may change the treatment form or terminate hemodialysis under the following situations:
  - (a) The patient cannot tolerate hemodialysis treatment due to other serious conditions such as intractable heart disease
  - (b) The patient refuses to undergo necessary examinations, procedures or surgeries.
  - (c) Repeated failure of vascular access creation.
  - (d) The patient shows certain contra-indications such as mental disease, stroke, terminal cancer, incurable disease or incompetence of self-care

### **During the Course of Treatment**

After starting CHD, patient should inform the renal centre staff of the following:

1. Abnormalities of the fistula (Please read with the Information Note on Arteriovenous Fistula)
2. Ailments such as cramps, nausea, vomiting, diarrhoea, fever, abnormal blood pressure (too high or too low), edema, shortness of breath, dizziness, general weakness and signs of bleeding (such as conjunctival bleeding, nose bleeding, coughing up blood, tarry stool and bruising) or injuries.
3. If patient's condition is serious, the helper should take him/her (or by ambulance) to the hospital for emergency treatment.

### **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 or the respective renal centre.