

## **Information On Temporary Hemodialysis (THD)**

### **Introduction**

Temporary hemodialysis refers to temporary dialysis with hemodialysis treatment. It applied to:

1. Patient with acute renal failure
2. End Stage Renal Failure (ESRF) patient who is on long-term peritoneal dialysis treatment but whose abdominal cavity is not suitable for dialysis at that time.

### **The Procedure**

The patient needs first to receive a surgical operation for the creation of a 'temporary vascular access (Please read the Information Note on Percutaneous Venous Catheterization). During hemodialysis, health care professionals will connect the venous catheter to a hemodialysis machine. The patient's blood will circulate through an artificial kidney, where metabolic wastes and excess fluid will be cleared. Purified blood will then return to the patient's body. Each hemodialysis takes 2-5 hours to complete. The patient may have to undergo hemodialysis for 2 to 3 times a week in the renal centre.

### **Risk and Complication**

#### **Common Risks 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. Risk Of Bleeding            |          |

#### **Rare Complications and Potential Serious Consequences**

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

### **Before the Procedure**

Before being accepted into the THD program, patients must agree on the following:

1. The patient has to agree for temporary 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. The creation of a 'temporary vascular access' is a surgery necessary for hemodialysis. If vascular access is not functioning well, repeated operation may be needed.
5. Learn to take care of the 'temporary vascular access' and know the possible complications.
6. If patient shows signs of anaemia in 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
  - (b) Repeated operation for the creation of a 'temporary vascular access' fails
  - (c) The patient refuses to undergo necessary examinations, procedures or surgeries
  - (d) The patient shows certain contra-indications such as mental disease, stroke, terminal cancer, incurable disease or incompetence of self-care
8. The patient must understand that temporary hemodialysis is a transitional treatment. Hemodialysis shall cease when the patient's kidney begins to function again (as in the case of acute renal failure), or when long-term peritoneal dialysis starts (ESRF patients for continuous ambulatory peritoneal dialysis or automatic peritoneal dialysis treatment), or when patient and his/her family opt for palliative care. Health care professionals will remove the 'temporary vascular access' to avoid complications.

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

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

1. Abnormalities of the 'temporary vascular access' (Please refer to the Information Note on Percutaneous Venous Catheterization).
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 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.