



## Procedure Information Sheet

### Introduction

Haemodiafiltration is a double pump method in which a substitution fluid is given continuously at a controlled rate into patient's blood, flowing through a high-flux dialyzer at a high rate and leaving into the dialysate. The unilateral movement of substitution fluid creates a better removal of water, solute and uremic toxins from patient's blood across a high-flux dialysis into the dialysate. Haemodiafiltration can be a temporary targeting at acute metabolic disturbance related or unrelated to acute kidney failure. It runs at life-long procedure in chronic kidney failure patients.

### Indication

- In acute kidney failure, haemodiafiltration is a procedure to remove toxic substances and regulate body fluid balance when the kidneys are temporary unable to do so, to allow the kidneys to rest or recover.
- In chronic kidney failure and end stage kidney disease, the haemodiafiltration is used to substitute for the absent kidney function indefinitely.
- In life-threatening situation, haemodiafiltration is used to quickly remove drug, toxic substance or large volume of fluid from the body.

### The Operation / Procedure

1. A catheter is inserted into the large vein in the neck, chest or femoral area.
2. The 'dirty' blood is pumped out of the body by a machine and flow across the membrane of the artificial kidney by diffusion and ultrafiltration.
3. Toxins and water are removed from the blood to the dialysate.
4. The 'cleaned' blood is then pumped back to the body.
5. Haemodiafiltration is an intermittent procedure. Each session lasts for about four to six hours. The treatment may be required two or three times per week.

### Before the Operation / Procedure

Fully explain the procedure and obtain patient's written consent if condition allows.

### After the Operation / Procedure

1. After the dialysis system is established, confine to bed and avoid excessive movement.
2. Extra care should be taken to prevent disconnection or pulling out of tubing.
3. Closely monitoring of body vital functions and regular blood test is required throughout the procedure to evaluate the treatment effects.

### Risk and Complication

1. Bleeding from the catheter site.
2. Systemic or catheter site infection.
3. Low blood pressure.
4. Low body temperature & chills during the procedure.
5. Headache.
6. Muscle clamp.

### Disclaimer

This leaflet only provides general information pertaining to this operation / procedure. While common risks and complications are described, the list is not exhaustive, and the degree of risk could also vary between patients. Please contact your doctor for detailed information and specific enquiry.

### Reference

1. Maduell F, Online Hemodialysis. *Kidney News*. Retrieved on 28-11-2018 from <https://www.kidneynews.org/kidney-news/special-sections/updates-in-dialysis/online-hemodiafiltration>
2. Blankestijn P J, Grooteman M P, Nube M J, Bots M L, (2018). Clinical Evidence on Haemodiafiltration. *Nephrology Dialysis Transplantation*, (2018) 33: iii53-58. DOI: 10.1093/ndt/gy218

#### Patient's Label

Patient Name: \_\_\_\_\_

Hospital No: \_\_\_\_\_

Episode No: \_\_\_\_\_

Patient's Signature: \_\_\_\_\_ Date: \_\_\_\_\_