



## Procedure Information Sheet

### Introduction

Peritoneal dialysis is the most widely effective home-based treatment for end stage renal failure (ESRF) patients in Hong Kong. Patient will has about 2 litres of dialysate instilled into the abdominal cavity that is patient's functional peritoneal access via a catheter. It will be drained out and replaced by new dialysate as scheduled to clear metabolic wastes of the body.

Continuous Ambulatory Peritoneal Dialysis: A continuous 24-hour method, which requires patients to perform solution exchanges 3 or 4 times a day.

Automated Peritoneal Dialysis: Dialysate replacement (3-4 bags daily) or (10-12L daily) is done by a programmed machine. The most common types of automated peritoneal dialysis are continuous dialysis by cycler and nocturnal peritoneal dialysis. The choice of treatment modality shall be determined by the nephrologist depends on patient's condition.

### The Operation / Procedure

1. About 2 litres of dialysate fluid is instilled into the patient's abdomen via a catheter.
2. The effluent, together with impurities and excess fluid from blood, will be drained out 6-8 hours later.
3. The abdomen will be refilled with a new bag of dialysate.
4. For Continuous Ambulatory Peritoneal Dialysis, patient needs to replace the dialysate 3-4 times every day and each time it takes about an hour to complete the process.

### Before the Operation / Procedure

1. Agree to undergo peritoneal dialysis catheter placement. If the catheter fails to function after surgery, re-operation may be needed.
2. Agree to receive APD treatment and follow instructions to perform dialysis. A written consent is required.
3. If a patient is incompetent of self-care and cannot perform dialysis, a member from his/her family will be needed for assistance. This helper must understand the procedures and be ready to help voluntarily, whose assistance must not be stopped abruptly or taken over by another person.
4. Understand the complications of APD and to detect any abnormality.
5. Patient should understand his/her responsibilities include:
  - 5.1 Perform dialysis by aseptic technique according to schedule;
  - 5.2 Take good care of catheter and catheter exit site;
  - 5.3 Use medicines and dialysate correctly. Note the appropriate temperature and concentration and volume of dialysate and follow procedures(antiseptic procedure/technique);
  - 5.4 Take the medicines according to schedule and follow the doctor's instructions on diet advice;
  - 5.5 Keep treatment records and attend follow-up consultations as required.
6. Follow instructions of the medical staff and on completion of training and regular maintenance of APD machine, the patient has perform APD at home.
7. If patient shows signs of anaemia in the course of treatment, blood transfusions or other treatment may be needed.
8. Other examinations, surgery or procedures may be needed in the course of treatment.
9. Take care of personal health. If there are contra-indications (e.g. mental disease, stroke, terminal cancer, incurable disease or incompetence of self-care), the authorities concerned may in accordance with medical principles cease dialysis or refer to renal palliative care service.
10. If patient or helper is unwilling to perform dialysis, they should inform doctor accordingly to consider cessation of peritoneal dialysis.
11. For Automated Peritoneal Dialysis, patient has to arrange appropriate regular maintenance and repair of the machine to ensure proper functioning and safety.

⌈ **Patient's Label** ⌋

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

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

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

⌋



### After the Operation / Procedure

After starting peritoneal dialysis, should inform doctor of the following:

1. Leakage or breakage of catheter;
2. Ailments such as cramps, severe abdominal pain, nausea, vomiting, diarrhoea, rising body temperature, abnormal blood pressure (too high or too low), edema, shortness of breath, dizziness, general weakness;
3. Dialysate is cloudy, turbid or flow is decreased;
4. Gradual increase in body weight with swelling or bulging of abdomen; main wound; catheter exit site; umbilicus; pelvic region; groin area; scrotum or vulva; and/or associated with pain;
5. Problems during dialysis:
  - 5.1 imbalance of dialysate/effluent;
  - 5.2 prolonged completion of process;
  - 5.3 catheter or transfer set contamination.
6. Inflammation at the exit site, such as redness, swelling and purulent discharge;
7. Abnormality of dialysate effluent is noted.

### Risk and Complication

1. Peritonitis;
2. Inflammation and bleeding at the exit site;
3. Inflammation along the catheter beneath the skin;
4. Catheter blockage or migration;
5. Pain (in the pelvic cavity, or the so-called 'sucking pains' caused by suction force during drainage of peritoneal fluid);
6. Hyperglycemia;
7. Fluid and electrolyte imbalance (such as dehydration or oedema);
8. Cramps;
9. Protein loss;
10. Increase in blood-lipid and triglyceride levels;
11. Weight gain or weight loss;
12. Abdominal hernia;
13. Scrotal or vulval edema;
14. Shortness of breath and respiratory distress due to pleural effusion or abdominal distention;
15. Stomach acid regurgitation;
16. Sleep disturbance by noise of the machine;
17. Fatal, rare but possible.

### 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. Smart Patient Website of Hospital Authority: Continuous Ambulatory Peritoneal Dialysis (CAPD) (2017)
2. Smart Patient Website of Hospital Authority: Automated Peritoneal Dialysis (APD) (2017)
3. Hong Kong College of Physicians, Hong Kong Society of Nephrology, Hospital Authority. (2019). Care of Patient on Peritoneal Dialysis. *Clinical Practice Guidelines for the Provision of Renal Services in Hong Kong*, 24(1), 87.

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

#### Patient's Label

Patient Name: \_\_\_\_\_  
Hospital No: \_\_\_\_\_  
Episode No: \_\_\_\_\_