



Royal Berkshire
NHS Foundation Trust

Continuous Ambulatory Peritoneal Dialysis (CAPD)

Your care at the Royal Berkshire Hospital

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Our vision

- We believe everyone has the right to holistic-based care and the right to be treated as an individual.
- We aim to involve family and friends in your care (with your agreement).
- All of you will be encouraged to care for yourself where possible and will be involved in planning and evaluating your care to achieve high standards.
- We believe that the use of research and new improved ideas must be encouraged and tested to ensure quality care is given.
- We believe in the multidisciplinary team approach to your care, and welcome comments and feedback from all involved.
- We accept individual values and cultures and will do our best to respect individual needs.
- We believe in assisting each of you to achieve the optimum level of functioning and well being that we can possibly obtain with your help.
- Dialysis care is a partnership between you and the staff. We need to work together to keep you fit and well.

If you have any comments that you wish to make – positive or negative – please direct them to Barbara Harris who is the Lead Nurse of the department.

About the CAPD Unit

Welcome to the Royal Berkshire NHS Foundation Trust CAPD (Continuous Ambulatory Peritoneal Dialysis) Unit.

The Renal team

You will be trained and cared for by a team of specialist renal nurses. Our aim is to promote independence and support for you away from the hospital environment.

Our team look after around 100 patients on CAPD from all over Berkshire. During training, you will be allocated one nurse. However, all team members will be aware of your needs and will be able to offer ongoing support and advice.

CAPD Clinic

We run an appointment system and would be grateful for your co-operation with this. Sometimes, there are unscheduled problems that have to be dealt with immediately. We are sorry if we keep you waiting but there is usually a very good reason. The unit staff also care for inpatients and oversee any stay you may have in hospital.

We run a daily outpatient service available to all patients for dialysis-related queries or problems. **Please discuss any other medical issues with your GP.**

Contacting us

You can leave non-urgent messages on the answer phone 0118 322 8555.

If you do have a problem please telephone as early as possible in the day - this gives us time to organise changes, medications, treatment etc that you may need.

Once you have started dialysis we will ask you to have a few tests. These give us very important information and help us to give you the best possible dialysis and treatment tailored to your individual needs. At the time of the tests, we will give you a full explanation, so please do not worry.

Admission to hospital

There may be a time when you have to come into hospital for a short stay. If this happens, the hospital inpatient staff are responsible for your care and one of us will visit daily to oversee your dialysis. Our team only deals with renal / dialysis related problems – the ward staff will look after you otherwise. If you are admitted, please bring your medication in its original packaging and a copy of your repeat medication list with you.

Please let CAPD know if you are admitted to any hospital (even if not renal related).

Blood tests

Blood tests can be performed locally at your GP, RBH, Wexham Park, St Marks, Newbury and Bracknell Hospitals.

If you are having the blood tests for clinic, you will need to have them done at least a week prior to your clinic appointment. Without these results, the doctors are unable to comment on your progress or plan your future care.

Understanding your treatment

Information related to dialysis can be complex, so please do tell us if you do not understand our explanations. It always helps to know why you have to take all the drugs etc, and we want you to be as informed as possible so that you can keep healthy and understand how your body works.

For CAPD treatment to be successful, a partnership between the unit staff and you is necessary. Unfortunately, with kidney disease, there are restrictions and guidelines that you need to follow to keep well, but we try hard to minimise these and make your days as free as possible.

Remember, dialysis is necessary to survive but you **can** lead a full and active lifestyle. It is possible for dialysis to fit around your day, and controlling it this way you will keep healthy in mind and body.

Who are the Renal team?

Dr Emma Vaux – Renal Consultant	Haemodialysis, CAPD
Dr Mobin Mohteshamzadeh – Renal Consultant	Transplant
Dr Nitin Bhandary – Renal Consultant	Transplant
Dr Oliver Flossmann – Renal Consultant	Kidney Care, CAPD, Renal Research
Dr Bassam Alchi – Renal Consultant and Renal Clinical Lead	Haemodialysis
Dr Carolina Canapa – Renal Consultant	HD / Kidney Care
Dr Rabya Sayad – Renal Consultant	Renal
Dr Harry Wakefield – Renal Consultant	Renal / HD
Dr Caroline Amery – Renal Consultant	Kidney Care / General Nephrology
Barbara Harris – Lead Nurse for Renal Home Therapies	Albert Ward
Joanna Tilbury	Sister for Renal Home Therapies
Nicki Kneller / Katie Shoebridge / Cecille Moncada	Renal CAPD Nurses
Diana Murdoch – Renal Social Worker	Renal patients living in West Berkshire
Denise Howard – Renal Social Worker	Renal patients living in East Berkshire
Kevin Jesty – Renal Dietitian	Renal
Tasneem Nalwala – Renal Dietitian	Renal

All consultants attend the weekly multi-disciplinary team (MDT) meetings and cover the Renal inpatients ward on a rota basis.

What is CAPD?

Dialysis

Dialysis is the process of removing waste and excess water from the body using a filter.

Peritoneal Dialysis

This uses a natural membrane, the peritoneum, inside the body as filter. It can be carried out in the home, at work or on holiday. The peritoneum is the lining of the abdomen, which surrounds and protects the internal organs. It has a large blood supply, which is necessary for dialysis.

Continuous Ambulatory Peritoneal Dialysis (CAPD)

This form of dialysis goes on daily for 24 hours. You are able to walk about, relax and work whilst dialysing. It uses the peritoneum, which is a natural filter to remove the waste products from the blood.

Dialysis fluid is infused into the peritoneum via a soft tube permanently inserted into the abdomen. Once the dialysis fluid is drained into the abdomen via gravity, dialysis begins. After about four hours, the fluid needs to be changed in order to remove the waste products filtered. This is done by draining out the fluid via gravity and replacing it with clean dialysis fluid. The process is called an exchange. Most people on CAPD carry out four exchanges daily leaving 4-6 hours in between. The last exchange is left in over night.

How does CAPD work?

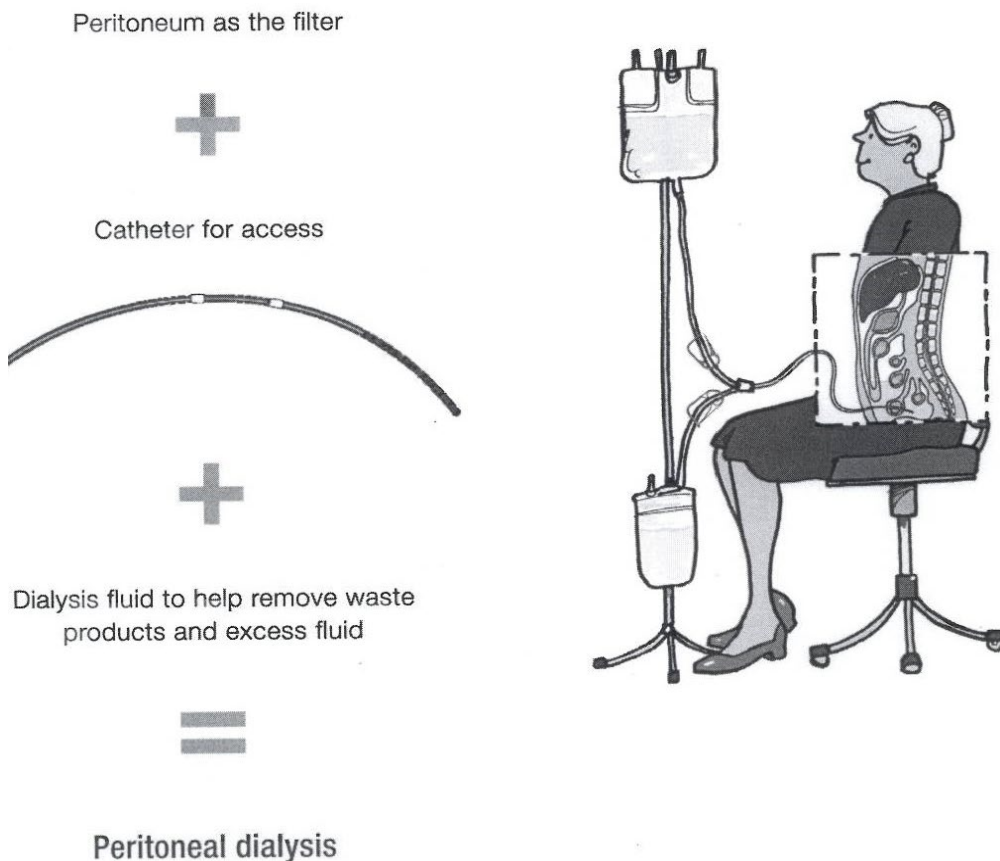
Dialysis is the movement of fluid and waste particles across a semi permeable membrane. There are three principles involved:

- Diffusion
- Osmosis
- Ultrafiltration

Diffusion is the movement of particles from an area of greater concentration to an area of lesser concentration. It results in the movement of urea and creatinine.

Osmosis involves movement of fluid across a semi-permeable membrane from a lower concentration to a higher concentration of particles. Osmosis is the movement of extra fluid from the patient on CAPD.

Ultrafiltration is the movement of fluid across a semi-permeable membrane because of an artificially created pressure gradient.



When do I do my dialysis?

Most CAPD patients do four exchanges per day.

The first exchange can be carried out first thing in the morning, incorporating it into your daily morning routine.

The next can be done either before lunch or after, whichever is more convenient or within the 4-6 hour time span.

The third exchange can again be done either before or after your evening meal, depending on your arrangements or which is closer to the time allowance.

Your last exchange of the day can be done just before you go to bed. The overnight fluid should not be left for more than 10 hours.

These times are flexible and can be adjusted to fit in with your lifestyle.

Where can I do my dialysis?

It is important that when you do your exchange it is somewhere private and clean. At home, you may have a room or an area. When at work or away from home ensure the environment is just as safe.

Before doing your exchange check there are:

- No pets in the room.
- No drafts; close windows, turn off fans.
- No distractions i.e. small children.
- You have all the necessary equipment.

When you are confident with doing your exchanges at home, you will want to venture out into the big wide world again. Please feel free to consult the renal unit staff for advice on ways to carry out your exchange safely.

Training

Introduction

One of the functions of the kidney is to remove excess fluid from the body. In chronic renal failure, this is ineffective on its own and dialysis is required. Dialysis is not as efficient at fluid removal as healthy kidneys; therefore, the amount of fluid that is taken in through drinking and food needs to be restricted. During your training, you will be given a 'dry weight' to maintain. At this weight, your blood pressure should be within normal limits and have no signs of either too much fluid (overloaded) or too little fluid (dehydrated).

Excess fluid in the body will cause the heart to work harder than it needs to.

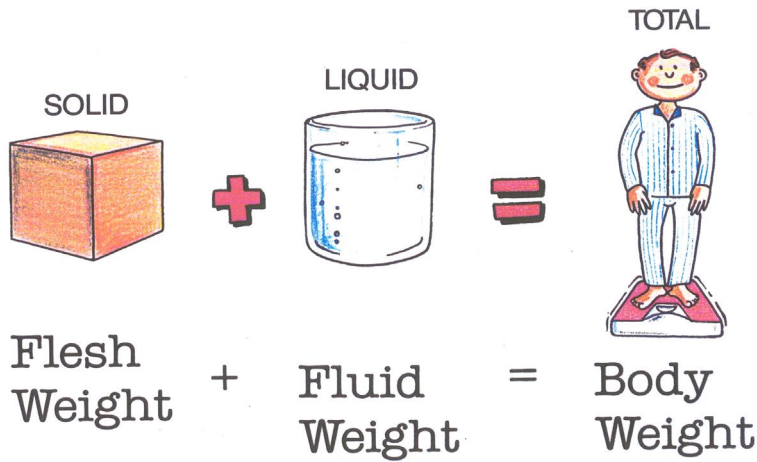
This causes high blood pressure. Persistent high blood pressure will cause a strain on your heart, increasing the risk of a heart attack and strokes.

Therefore, it is important that you monitor yourself and with our guidance, act accordingly to minimise the unnecessary strain on your cardiac system.

Fluid balance

Your total weight is made up of two parts:

- Flesh weight
- Fluid weight

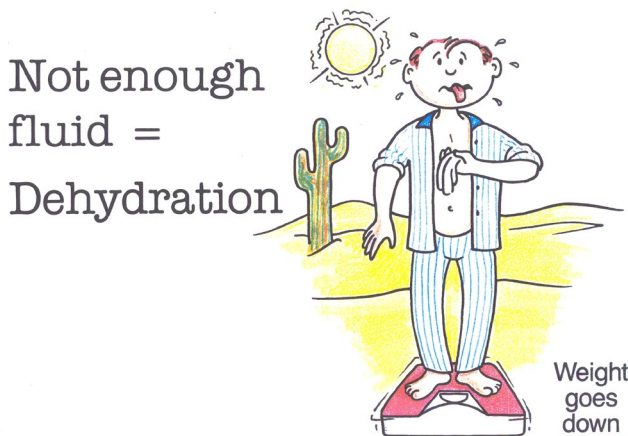


Flesh weight: this remains fairly constant. Any gain in flesh weight is gradual.

Fluid weight: this is affected by the amount of fluid you take in.

Any sudden change in your weight will be due to an **increase** or **decrease** in the amount of fluid in your body.

Not enough fluid – weight **decreases** – this is ***dehydration***



Too much fluid – weight **increases** – This is ***overloaded***

Too much
fluid =
Fluid
Overload



Weigh yourself when you have drained out.

Fluid removal

There are three possible ways your body removes excess fluid:

- **Urine output.** This is reduced in renal failure.
- **Dialysis.**
- **Perspiration.** This is minimal in renal failure.

As you can see your body's ability to remove fluid is very much reduced. It is important to remove excess fluid to reduce the demand on the heart or it is likely that your blood pressure will rise.

What goes in must come out

If you take in 1 litre of fluid in drinks or food, you must remove 1 litre of fluid.

Fluid selection

To maintain your **dry weight** you must check your weight daily. We will teach you how to alter the strengths of the dialysis solutions to assist with this.

There are four strengths of fluid:

- 1.36%, Weak, **YELLOW**
- 2.27%, Medium, **GREEN**
- 3.86%, Strong, **RED (Rarely used at the RBH)**
- **Extraneal:** a glucose free bag used at night or long dwell during the day for diabetics or those with a clinical need.

The different strengths refer to the content of glucose or sugar in the bag. The higher glucose content, the more fluid removed.

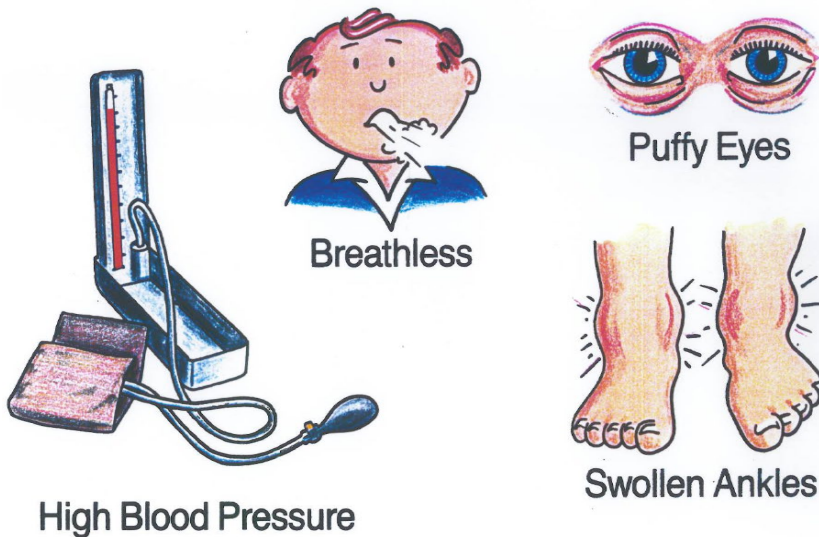
We will advise you of the most appropriate regime for you to use when you are ready to go home. **It is very important that you monitor your fluid balance once at home.**

Overloaded

Fluid overload is too much fluid in your body. This could be due to drinking too much (including hidden fluid) or not draining enough fluid out.

Symptoms of fluid overload:

- Weight increases.
- Swollen feet and ankles.
- Shortness of breath, particularly when lying down in bed.
- Puffy eyes.
- Raised blood pressure.



What to do?

- Drink less.
- Use a stronger bag.
- Make sure you are not constipated.
- Observe for fibrin. Add heparin if necessary.
- Telephone the CAPD Unit.
- If fluid overload continues, or is something that happens regularly, it can cause a strain on your heart. It may be that your regime needs to be changed. You must discuss this with the nurses and doctors until you feel confident in adjusting your own bags.

Remember: you need to let your dialysis supplier and the nurses know any regime change as soon as you know.

Dehydration

Dehydration is too little fluid in the body. It may be due to illness / vomiting or using too many strong bags. It can also occur if you are over cautious with your fluid restriction and in hot weather if you perspire more.

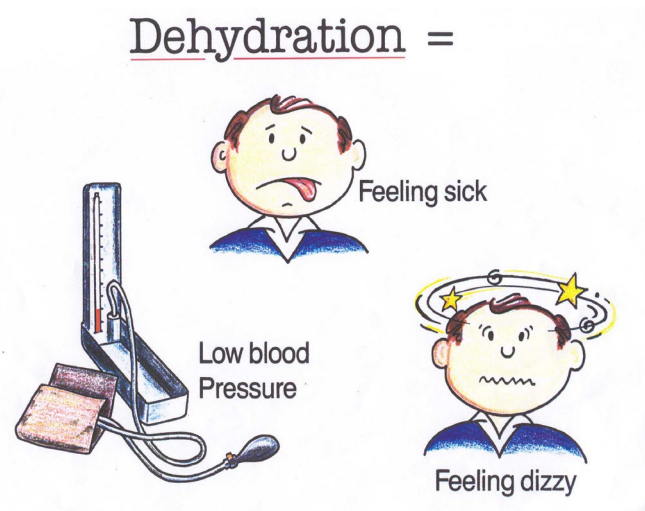
Symptoms of dehydration:

- Weight reduced.
- Cramps.
- Low blood pressure, which can cause dizziness.
- Thirst and dry mouth.
- Tiredness.
- Nausea and possibly vomiting.

What to do?

- Do not use stronger bags.
- Drink a little more until back to normal.
- Ring the CAPD Unit for advice.

Once you have reached your dry weight, again continue on your usual regime.



Infection prevention

Why?

The skin is the body's first line of defence against infection. This has been broken by the insertion of a peritoneal dialysis catheter. This gives bacteria two ports of entry:

- Peritoneal catheter when doing an exchange.
- Exit site – where the catheter comes out of the abdomen.

There are bacteria all over our bodies, which live happily in the correct places. When these bacteria move to another area of the body, they can cause infection.

The body's immune system responds to the infection and this is what gives us the symptoms:

- Inflammation
- Pain
- Pus / discharge/ Cloudy dialysis

The body is not always able to deal with the infection on its own and therefore requires antibiotics. An infection within the peritoneum is called **peritonitis**. This is an inflammation of the peritoneum. It can be painful and can cause peritoneal scarring reducing the effectiveness of the peritoneum as a filter for dialysis.

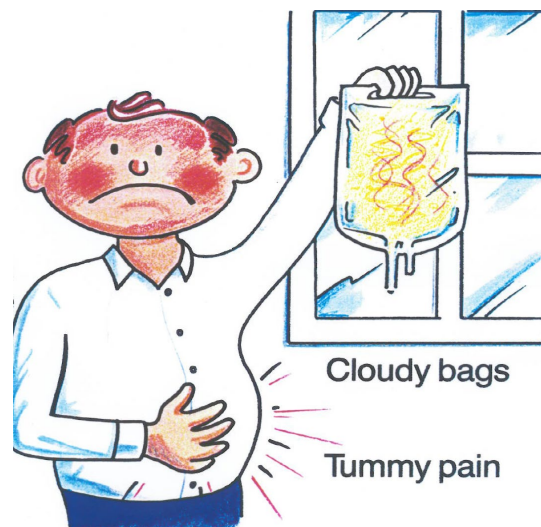
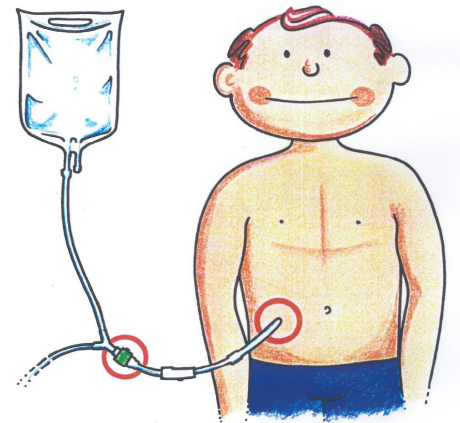
This is why we teach you the exchange procedure so carefully.

Peritonitis is the main reason patients leave a CAPD programme. Fortunately, most episodes are avoidable.

What to look for

- Cloudy bag. **Never ignore a cloudy bag.**
- Tummy pain.

If you suspect you have peritonitis, you must contact the unit immediately. If it is out of hours or at the weekend, ring Victoria Ward on **0118 322 7462**.



Causes of peritonitis

- Inadequate or absent hand washing techniques.
- Procedure carried out in a hurry.
- Distraction.
- Dropping line.
- Sneezing or coughing onto line.
- Split line.
- Poor exit site care.
- Diarrhoea / bowel problems / constipation.

Hand washing technique

There are thousands of bacteria living on your hands all the time. While they are on your hands, they do not cause any problems, but if they get elsewhere in the body, they cause an infection, and even **peritonitis**.

This means that before you do an exchange, **you must wash your hands using an anti-bacterial solution**, such as Carex soap, which will remove a large proportion of the bacteria.

When washing your hands you must:

- Use running water.
- Ensure you thoroughly scrub all surface of hands.
- Hand washing should take at least 30 seconds.
- Rinse hands thoroughly.
- Use paper towels to dry hands.



Once you have washed your hands it is important to remember that you must not touch anything other than your dialysis equipment, i.e. no touching nose, hair, clothes etc. otherwise you will have to wash your hands **again**.

It is a good idea to use hand cream after your exchange to keep your skin healthy.

Exit site care

The exit site is where the catheter leaves / enters the body. It is important to remember that a clean exit site will reduce the risk of **peritonitis**. Any infection sitting around the exit site can potentially track down the catheter into the peritoneum.



Exit site infection

Exit site infections can be easily treated with oral antibiotics, if reported promptly. Always check your exit site for signs of infection:

- Redness.
- Pain / tenderness.
- Excessive crusting – some is normal.
- Discharge / pus.



How to minimise risks

1. Keep clean and dry.
2. Keep well anchored with tape or a dressing to avoid pulling.
3. Check exit site daily.
4. Good personal hygiene. Showering is preferable but, if bathing, keep water level below the catheter.
5. Always change the exit site dressing **immediately** following showering and bathing **never** leave a damp dressing in place.
6. Once the exit site is well healed, you may swim, but only in chlorinated water.

Changing the dressing

1. Remove old dressing.
2. Wash hands with Carex. Clean a hard surface with Sanicloths 60% wipes.
3. Open two or three Clinell 2% Chlorhexidine in 70% alcohol skin wipes.
4. Rub hands thoroughly with Purell gel.
5. Pick up the corners of the Clinell wipe and clean exit site in a circular motion. Discard and repeat. Then clean along the catheter away from the exit site with another Clinell wipe.
6. Secure the catheter with a cross of tape.
7. Apply a new dressing. Ensure that it is firmly stuck down on all four sides, making a loop in the catheter.

Exit site care is individual and should be guided by the nurses. **Never leave a damp dressing on.** This may result in an **infection.**

Baths and showers

- Baths **must** be shallow – well below the level of the exit site. We do realise this is difficult for those of you who are used to soaking in full tubs of water but it is important that the exit site remains as dry as possible.
- Showers are preferable – keep your back to the shower. Try to avoid wetting the exit site too much.
- Change dressing after a bath or shower. The same applies when swimming.
- Shower using shower gel or tablet soap.

Swimming

Swimming is an excellent form of exercise; it is gentle and uses a large number of your muscles.

Now you are on CAPD there is no reason why you cannot start or continue to enjoy swimming or exercise. Follow these important points and you will be able to enjoy it:

- Always swim in chlorinated water. Avoiding swimming in the sea.
- Apply a clear adhesive dressing or a specially designed waterproof pouch (available from the CAPD nurses) covering your exit site and catheter. The CAPD staff must always review your exit site first.
- Always change your exit site dressing after swimming.
- Start gradually building up the length of time spent in the pool.
- We advise against you having saunas because of the potential of sudden drops in blood pressure.



Follow-up

- Aftercare
- Clearance / PET
- Non-dialysis related problems
- Clinics
- Blood tests
- Medications
- Holidays
- Exercise and sexual relationships



Aftercare

Dialysis related problems

We hold weekly team meetings that are attended by all the staff associated with your care – doctors, nurses, social workers etc, who discuss any progress and problems you may have. These meetings are also used to discuss as a team the most up-to-date treatments and research. We strive to continue to improve patient care.

If the nurses are unable to answer your enquiries, we will direct them to the medical staff. Routinely, a renal consultant will see you in a clinic setting every one to three months to discuss treatment progress and any changes, worries or concerns you may have. If you have any worries or comments between those appointments please direct them to CAPD nursing staff in the CAPD Unit.

When contacting the nurses, if we are unable to answer the telephone, there is an answer phone. Please leave your name, contact number and a short message and we will get back to you as soon as possible.

When patients attend the unit, we will endeavour to see you as soon as we can. In order to reduce your waiting time and enable ourselves to manage our time effectively, we will give patients appointment times.

Please always phone before visiting the unit.

Clearance

When you have been on dialysis for four weeks or more we will carry out a clearance study to ensure your dialysis is adequate. This study will require you to collect all the urine you pass in 24 hours and all the dialysis fluid you drain out on the same day. We will give you more detailed instructions nearer the time, plus any equipment you need to carry it out.

The test is then repeated at six monthly intervals in order to ensure that we are giving you the best possible treatment. It gives us important information about what poisons are cleared from your body.

Peritoneal Equilibrium Test (PET)

This is usually carried out six weeks after starting dialysis. The test will show us how your peritoneum works. We can then alter or fine-tune your dialysis regime to your individual needs to maintain your wellbeing. Some patients are suitable for automated dialysis, which can take place at night time using a cycler machine but not all patients are suitable for automated dialysis.

The test involves taking several dialysis samples and a blood test over a two hour period.

Non-dialysis related problems

If you have any health problems not related to dialysis, you must visit your GP. If your GP requires advice, they should speak with our renal medical staff. Each time you attend the hospital for clinics or if you are admitted to hospital, your GP will get a letter explaining any treatment or changes that have been made.

Clinics

After training on CAPD, you will get clinic appointments two and six weeks after completion of training.





After this, clinics will be every one to three months; these run at Newbury and Bracknell for your convenience. The CAPD nurses will discuss location during training. If you require transport, please arrange directly with the clinic staff although we do encourage patients to make their own way to the hospital. The ambulance transport service is very busy and should be kept for only those patients who have medical needs.

Patients on certain benefits are entitled to reclaim their transport costs - the renal social worker will be able to advise you.

Your overall care is shared with your GP. For this reason, the renal doctors will always ask what medications you are taking, to ensure they are appropriate.

Always inform us if your GP has made any changes. **Please bring your medications with you and have a blood test two weeks before the clinic appointment.** Please also bring your record book to every clinic to check your weights, the dialysis regimen and its effectiveness.

Blood tests can be done at:

<ul style="list-style-type: none"> • Your GP's surgery 	
<ul style="list-style-type: none"> • Wexham Park Hospital (book online via Swiftqueue. Bring an ICE blood test form (either handed to you at clinic or emailed to you and printed yourself) 	
<ul style="list-style-type: none"> • St Marks Hospital Maidenhead (book online via Swiftqueue. Bring an ICE blood test form (either handed to you at clinic or emailed to you and printed yourself) 	
<ul style="list-style-type: none"> • Bracknell HealthSpace (book online via Swiftqueue. Bring a paper ICE or EPR form (either handed to you at clinic or emailed to you and printed yourself) 	
<ul style="list-style-type: none"> • West Berkshire Community Hospital Thatcham (book via automated system 0118 904 7900. Bring a paper EPR form or get one printed at WBCH Outpatient reception before the blood test) 	
<ul style="list-style-type: none"> • The Royal Berkshire Hospital (book online via Swiftqueue) 	

Blood tests

What do they mean?

- **Renal profile:** Provides valuable information on how your dialysis is going, and the effects of certain medication.
- **Full blood count:** Measures haemoglobin the red blood cells that carry oxygen around your body a drop in these can result in anaemia.
- **Parathyroid Hormone (PTH):** A hormone excreted by the parathyroid glands located in the neck. PTH assists the body in maintaining blood calcium levels.
- **Cholesterol:** A fatty substance vital for normal functions of the body. Too much cholesterol increases the risks of developing heart disease. We randomly check six monthly. If it is found to be high, tablets may be required to help lower your cholesterol.
- **Viral screen:** Monitors many different viruses in the body, i.e. Hepatitis B and C, HIV.

Medications

Renavit / Diallyvit is a multivitamin, which is used to provide an 'all in one' supplement for those on peritoneal dialysis. It is very important to remember CAPD rids the body of poisonous waste plus some needed substances like water-soluble vitamins. **Please do not take over the counter vitamins without consulting your renal doctors.**



Senna / Lactulose / Fybogel / Docusate: these are laxatives that must be taken regularly, not when you become constipated. Constipation can slow the dialysis drainage flow or even stop it.

Phosphate binders e.g. Calcichew, Renagel, Phosex: in people with healthy kidneys, phosphates from the diet pass out in urine as a waste product. In people with renal failure, phosphate levels build up in the blood causing itching, and they can also lead to bone disease, if not controlled. In order to prevent complications, take these binders with food so they bind with the phosphates and allow it to be passed out in bowel motions.

Note: Calcichew must be taken with the first mouthful of food. **Not to be taken at the same time as iron supplements or certain antibiotics** – check with your Renal team if you have any concerns.

Intravenous iron: in order to produce healthy red blood cells our bodies require a good iron store. In renal failure, this store needs to be increased. To address this, an intravenous infusion or 'drip' may be required. This takes approximately one hour in the CAPD Unit. If you require this treatment, we will arrange it and notify you by post.

Erythropoietin (Eprex / Micera): this is a hormone usually produced in the kidneys. The hormone assists the body in producing new red blood cells. It is administered subcutaneous injection (under the skin) once a week / fortnightly / monthly, depending on the preparation used. Not all patients require this. For some, dialysis itself can improve anaemia. If Eprex is required, it is delivered directly to the patient's home.

Alpha Calcidol: also known as One Alpha. It is a vitamin D supplement, which is given to help keep bones strong. It is usually taken three times per week, at night. The dose of One Alpha will be changed, depending on your blood results. **Do not buy vitamin supplements over-the-counter – they may be unsuitable for renal patients!**

Anti-hypertensives: given to lower blood pressure. Hormones, which control blood pressure, do not always work efficiently in kidney failure. Sometimes, drugs such as Lisinopril, Amlodipine and Doxazosin are required. Often, despite many years on certain anti-hypertensives, once dialysis is established **some** patients are able to reduce or even stop long standing medications. We will discuss this with you in clinic.

Holidays

Please note: We strongly recommend you are Coronavirus (COVID-19) vaccinated prior to making any plans to travel – for many countries it will be an entry requirement.

Tips for planning holidays on CAPD

Once you have been on dialysis for a little while you may well start to think about doing your dialysis away from home. With a little planning, holidays can be arranged.

- Check with the doctors in clinic that you are fit to travel before you book your holiday. **We can only organise fluid for one holiday per year for a maximum of 28 days to allow everyone the opportunity to travel.**
- Check **well in advance** with nursing staff if your fluid is available at your chosen destination and how long it will take to deliver or see the list further on. **This must be done prior to booking – it is not always possible to get certain supplies to all destinations.**
- Due to additional costs in the CAPD contract for dialysis fluid we ask, that where at all possible, you avoid the certain countries - see list further on. We appreciate that for some this may not be possible as you have relatives in these countries. Please talk to the nurses if you wish to visit a destination listed. It could be possible but it may mean you (the patient) will have to pay.
- There may be a need for a switch to a slightly different fluid and connection for certain destinations. The unit will be informed if there is any variation to what you are used to and we will provide you with the necessary information / training prior to your holiday.
- When booking your holiday obtain full details of address and contact number for delivery.
- When taking out travel insurance you must state that you are on CAPD and whether you are on the transplant list (if you have any problems getting insurance discuss with the CAPD nurses they will not be able to recommend but have addresses of companies other patients have used).

- Inform your destination i.e. hotel, that your fluid will be delivered a few days before your arrival.
- Give the nursing staff the full details of your holiday including: travel dates, destination address and contact phone number, booking number and whose name your holiday is booked under. We also need your current dialysis regime.
- You will receive confirmation of your fluid order within two weeks **If you don't, please contact the unit.**
- If you change your regime prior to going on holiday, please inform the unit immediately
- Two weeks before you are due to travel or following your clinic visit if it is just before you travel, contact the unit for travel letters for customs, the cabin crew and doctor.
- Please inform your dialysis supplies co-ordinator if you will be away when they are due to call or deliver so they can reschedule. Also, remember to reschedule hospital appointments and inform your EPO delivery co-ordinator.
- **It is essential if you are on a transplant list that you let them know you are going on holiday.** You will be suspended from the list for the duration of the holiday. On return from your holidays, you will require a tissue typing blood test being reactivated on the list.



Tips for successful holidays on CAPD

- Only your fluid can be delivered but you will need to take caps and shields, your warming box (and possibly an adapter), and all your cleaning fluids, dressings, yellow rubbish bags etc. **Do not forget your medication.**
- Chemists (such as Boots and Superdrug) sell small empty travel bottles ideal for taking small amounts of cleaning fluids. You are only able to take 100mls of any fluid through customs – you are able to take multiple bottles as long as only 100mls. Please decant a small amount of your cleaning solutions for the journey putting the remainder in your main luggage. Anything greater than a 100mls will be confiscated.
- Take clear adhesive dressings or waterproof swim pouches to cover your exit site if you are planning to swim in a chlorinated pool. **Avoid swimming in the sea.**
- If you want to do an exchange at the airport, book the use of their first aid room before you travel.

- Think about your journey – will you need to do your dialysis at different times to allow for time differences, journey etc (talk to the nurses if you want some advice).
- Remember, if it is hot you may need to use weaker fluid or drink a little more than normal to stop yourself becoming dehydrated.
- Drink bottled water and avoid ice cubes and salads when abroad to avoid tummy upsets.
- Do not take shortcuts when doing your dialysis on holiday, this may lead to infection and spoil your enjoyment, and could result in a period in hospital while on holiday.
- **You must** take the yellow rubbish bag either to local doctors or to hospital at the end of your holiday.

How long does it take to get fluid to your holiday destination?

- | | |
|-------------------------------|-------------------------------|
| • Austria: 4 weeks | • Italy: 6 weeks |
| • Balearic Islands: 4-6 weeks | • Kenya: 10-12 weeks |
| • Britain: 3 weeks | • Mainland Spain: 4-8 weeks |
| • Canada: 4 weeks | • Malaysia: 8 weeks |
| • Canary Islands: 8-12 weeks | • Malta: 8 weeks |
| • Caribbean: 8-12 weeks | • Mauritius: 10 weeks |
| • Channel Islands: 4 weeks | • Netherlands: 4 weeks |
| • Cruises: 4 weeks | • Nordic Countries: 4-6 weeks |
| • Cyprus: 8 weeks | • Poland: 8 weeks |
| • France: 4 weeks | • Portugal: 4-8 weeks |
| • Germany: 4 weeks | • South Africa: 4-12 weeks |
| • Ghana: 10 weeks | • Sri Lanka: 12 weeks |
| • Gibraltar: 4-6 weeks | • Switzerland: 4-6 weeks |
| • Greece & Islands: 8 weeks | • Thailand: 8 weeks |
| • India: 10-12 weeks | • Turkey: 8 weeks |
| • Ireland: 4 weeks | • USA: 4-10 weeks |

We are unable to get fluid to Pakistan / Philippines and Hong Kong using Baxter Healthcare – please discuss this with the team. Currently the only way to deliver to these destinations is by the CAPD Department delivering a 28-day supply of fluid to your home address. You would then personally have to make arrangements to ship or air freight to the destination yourself.

Please avoid the following countries if possible due to the cost involved in delivering fluid. If you do wish to go to one of the countries please talk to the nurses.

- Argentina
- Australia
- Brazil
- Israel
- Japan
- Mexico
- New Zealand
- Philippines
- Saudi Arabia

Sport and exercise

Most types of sports and exercise are possible for patients on CAPD, but always start gently and gradually build up. Just 30 minutes of walking 2-3 times a week can make a real difference, starting by walking from the front door to the garden gate. Set achievable goals that can be increased as time goes on.

Swimming is a gentle form of exercise suitable for most patients. We encourage swimming in a chlorinated swimming pool but discourage swimming in the sea due to the risk of infection. Please check with your renal nurse before you go swimming.

For the more energetic, if the sport involves contact with others running or abdominal exercise you should check with your renal nurse or Renal Doctor before you start.

For all sport, you may find that it is more comfortable to drain your fluid out beforehand. With the more active sports, this can also reduce the risk of developing a hernia. Discuss this with you renal nurses.



Sexual relationships

Sexual intercourse is possible for people on CAPD and some people notice an improvement in their sex lives when they start dialysis. You may find it more comfortable with the fluid drained out. However, remember when restarting CAPD not to forget the flush before filling with new fluid. On APD you will have to bypass the initial drain cycle.

Patients with renal failure are still able to conceive. If you are of childbearing age, contraception is still necessary even if your periods have stopped because of renal failure. You should discuss the different options available with your doctor or nurse.

Whichever form of CAPD you are on, always ensure your catheter is firmly secured to your body. Many people find that during sexual activities it is better to tape the tube around the side of your body, away from the exit site, to prevent the



catheter being tugged during intercourse. You and your partner may also need to experiment with different positions until you find what is comfortable for you. Unfortunately, some people with kidney failure will experience sexual problems, such as reduced sex drive, impotence (difficulty in getting and sustaining an erection) and problems with fertility. If you do experience any difficulties then do discuss them with your renal doctor or nurse because there is help available.

Troubleshooting

- Problems
- What if...?
- How to add heparin
- Remember these points
- Useful numbers

Problems

Fibrin in bags	
Cause	Irritation of the peritoneal membrane.
Symptom	White 'stringy' substance in drained bag.
Action	After instruction, you can add heparin to the next bag. This dissolves the fibrin. If catheter has become blocked you must attend the unit.
Blood in drainage bags	
Cause	Usually from a small blood vessel 'bursting' in the peritoneum. Can happen if you have been lifting heavy objects or being 'energetic'. In females, may occur around ovulation or during a period.
Symptom	Drained bag will be anything from pink to bright red.
Action	Do not panic. If the fluid is just pink, continue your dialysis the next bag should become clearer. If it does not ring the unit for advice.
Difficulty draining out	
Cause	<ul style="list-style-type: none"> • Clamp on line or your line is not open. • Kink on line, or drainage bag. • Not enough gravity, the drainage bag is not low enough. • Constipation. • Fibrin. • Catheter may be twisted, trapped under the dressing or moved inside you.
Symptom	Taking longer than usual or nothing draining.

Action	<ul style="list-style-type: none"> • Check clamps open. • Ensure line is free from kinks or blockages. • ‘Milk’ the line to try to move the fibrin. • Stand up to try to increase gravity. • If you are constipated increase amount of laxative. • Check dressing / tape / clothing, <p>If in doubt, ring the unit for advice.</p>
Difficulty draining in	
Cause	Similar to draining out.
Symptom	Taking longer than usual, or not going in at all.
Action	<ul style="list-style-type: none"> • Seals are not broken. • Check line for kinks. • Check clamps open. • Raise height. <p>If in doubt, ring the unit for advice.</p>
Pain on inflow	
Cause	<ul style="list-style-type: none"> • Inflow may be too rapid. • Dialysate too hot or too cold. • Constipation. • Catheter tip could be touching a nerve. • Peritonitis
Symptom	Pain.
Action	<ul style="list-style-type: none"> • Lower the height of the bag. • Adjust the on/off clamp to slow the flow. • Ensure fluid is warm. • Address bowels. • Ensure fluid is clear. Never ignore a cloudy bag!
Shoulder pain	
Cause	<ul style="list-style-type: none"> • Either missing out flush or not doing adequate flush. • This allows air into the peritoneal cavity, or fluid may be too cold.
Symptom	Shoulder pain.
Action	<ul style="list-style-type: none"> • Ensure adequate flush is carried out – 15 seconds. The pain may take a few days to clear. • Paracetamol may be required. • Ensure the fluid is warmed prior to use

What if...?

Line disconnection	
Cause	This can occur where the catheter meets the white plastic or the metal connector. If it does, fluid will leak out.
Symptom	Large amounts of fluid leaking!
Action	<p><u>You are at risk of infection!</u></p> <ul style="list-style-type: none"> • Re-connect the two parts. • Drain out, <u>do not</u> drain fluid in. Contact the unit immediately. • You will require antibiotics. • You are at high risk of peritonitis.
Split line	
Cause	This can be caused by a sharp object coming into contact with your catheter, i.e. zips.
Symptom	Fluid leaks from the actual catheter.
Action	<p><u>You are at risk of infection!</u></p> <p>Clamp line above tear or leak and contact the unit immediately. You will require antibiotic treatment as soon as possible!</p>
Line contamination	
Cause	The end of your line has been touched or dropped.
Action	<p><u>You are at risk of infection!</u></p> <p>If you have fluid in, drain out, reapply mini cap. Do not drain fluid in. Contact the unit Immediately. Intra-peritoneal antibiotics will be required as soon as possible!</p>
Cloudy bag	
Cause	Peritonitis
Symptom	Fluid cloudy, you may also have some discomfort or pain.
Action	<p><u>You are at risk of infection!</u></p> <p>Contact the unit or, if out of hours, Victoria Ward immediately. Even at night! You will require intra-peritoneal antibiotics as soon as you discover the cloudy bag.</p>

Never ignore a cloudy bag

You will be more comfortable with fluid in, so refill prior to coming to the hospital. Bring the cloudy bag with you.

Untreated peritonitis can lead to hospitalisation, the possibility of losing your PD catheter or the need to switch to haemodialysis or even death if left. **Please be vigilant and act quickly if occurs.**

Remember these points

1. Weigh yourself daily, **after** you have drained out and **before** draining in.
2. Watch out for signs of overload:
 - Weight up
 - Breathlessness
 - Swollen ankles
 - Puffy eyes
3. If overloaded:
 - Drink less
 - Do use a strong bag
 - Ring unit if no improvement
4. Watch out for signs of dehydration:
 - Weight down
 - Feeling sick
 - Dizzy when standing
5. If dehydrated:
 - Drink a little more
 - Don't use a strong bag
 - Ring the unit if no improvement
6. **NEVER** take short cuts with your bag exchange. Keep your exit site clean and anchored with tape.
7. Avoid constipation.
8. Ensure you keep a good protein intake – especially when you are unwell or have peritonitis. If in doubt, then ring the dietitian for advice as supplements maybe necessary.
9. **Never ignore a cloudy bag!**
10. Add heparin if you find fibrin, a transparent looking substance resembling egg white or a white 'stringy' substance.
11. Take your medication as directed and get more from your GP **before** you run out. All your medication is very important. Always take Calcichew before or with meals. We may adjust some of your tablets in clinic in response to your blood results.
12. Remember – drain the old – flush the line – fill with new.

Useful numbers

Barbara Harris	Lead Nurse for Renal Home Therapies Phone 0118 322 7322
Jo Tilbury	Renal Home Therapy Sister Phone 0118 322 8555
Nicki Kneller / Katie Shoebridge / Cecille Moncada	Renal Nurses Phone 0118 322 7322 / 0118 322 8555
Nicki Malha / Constance da Silva	Health Care Assistants
Kira Stagg	Assistant Nurse Practitioner
Diana Murdoch / Denise Howard	Renal Social Workers Phone 0118 322 8772
Kevin Jesty / Tasneem Nalwala	Renal Dietitians Phone 0118 322 7117 Bleep 709

Other useful telephone numbers:

Baxters Customer Service, Wallingford Road, Compton, Newbury RG20 7QW
Tel: 0800 0234 002

Polarspeed, Chartmoor Road, Leighton Buzzard LU7 4BR
Tel: 0800 783 3178

Please ask if you need this information in another language or format.

Royal Berkshire NHS Foundation Trust, June 2024

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