

down a job. If they had no spare room to dialyse in, a porta-cabin was dropped into the back garden and water and electricity connected.

As I progressed through the years of my dialysis career in the United Kingdom the machines became more refined and automated. I recall the Lucas machines we used at Guys, they came in a very attractive blue or orange colour and more up to date

Dyalades where home patients could leave the lines and dialyser on the machine, clean them out with water, then sterilise them and be ready to rinse and reuse. Then came the Cobes and the Gambros.

On reflection, our patients survived despite us rather than because of us, and I have to say that it has been a privilege to have been working in dialysis for so long and to have the experiences I have had.

There is even a degree of envy toward those who have been around about 10-15 years longer than me. What tales they have to tell! I sometimes feel sorry for staff coming new to dialysis where everything is computerised and worked out for them. However, I know that if they are still around in 20-30 years, they will be looking at the youngsters and saying "you don't know you are born, why, in my day".

Recollections of a renal nurse in the 1970s

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Abstract

This paper describes renal nursing of people receiving haemodialysis and peritoneal dialysis in Sydney in the 1970s.

Key Words

history, renal, peritoneal dialysis, haemodialysis, nursing

Most patients vomited during and after dialysis and suffered headaches and severe cramps

Renal nursing in 1974 when I started at Sydney Hospital was challenging but very satisfying. Patients were young, often yellow and very sick. Nobody over the age of 60 years received dialysis as there were only six machines! Imagine a renal ward without Erythropoietin, beta blockers or angiotensin-converting enzyme (ACE) inhibitors.

In 1974, Ward 17 at Sydney Hospital had a Nightingale style renal and haematology ward, with a verandah off it which housed the six haemodialysis machines. Team nursing occurred with a registered nurse and two student nurses (usually a 3rd year and a 1st year) responsible for 14 patients, including two patients in reverse barrier nursing and a laminar

flow bed because of chemotherapy for haematological conditions. Another registered nurse and one student nurse were responsible for the other 10 patients, including one who was being reverse barrier nursed. Student nurses were trained by the hospitals with blocks of time put aside for teaching. During this teaching time the wards were minus those nursing hours. A postgraduate six month renal course commenced at Sydney Hospital in 1972. My student nurse training had provided me with minimal renal knowledge (that I remembered) so I enjoyed doing this course in 1974.

Hypertensive crises were common with encephalopathy and patients often experienced fits. Hypertensive patients

had the head of their beds propped up with 12 inch bed blocks. Blood pressure was lowered dramatically with the use of intravenous Diazoxide. I recall medication trials of Clonidine, then beta blockers, plus more recent diuretics. I recall that the only diuretics used in the early days were Lasix and Aldactone. Medication rounds were long and nightmarish. However, there were less options in medications. The first parathyroidectomies were done without Dihydroxycholesterol. We gave intravenous calcium, and did Chvostek's sign tests to the cheekbone to ascertain low calcium levels. Emergency blood results were not very fast.

Analgesic nephropathy was rife. Patients presented and re-presented with sloughed papillae and obstructed ureters, with the Bex/Vincent powders in their lockers,

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despite repeated warnings. They would be discharged after a cystoscopy and retrograde pyelogram had displaced the sloughed papillae and relieved the obstruction.

Other units in Sydney at that time included Royal Prince Alfred, St Vincent's and Concord. Patients from the Blue Mountains were picked up at 2–3am by ambulance and delivered to the dialysis unit, then returned home more than 12 hours later – three times a week!

Renal biopsies were performed in the ward, initially by a nondisposable Vim silverman needle, which was later replaced with disposable needles. Classification of glomerulonephritis was in its infancy.

People older than 60 years did not get offered dialysis. I recall that at this time there was also a cutoff age for intensive care of 60 years.

Patients often presented with near end stage renal failure but just as often right at end stage. Acute dialysis was via a hard catheter into the peritoneum which would then be replaced at a later date by a Tenckhoff catheter. The catheter was inserted in the ward by the resident, and peritoneal dialysis fluid, previously warmed in a water tank, was delivered from a glass bottle. Peritoneal dialysis was initially performed hourly manually 24 hours per day. There have been variations on this design but it is basically the same catheter used now. Peritonitis was more common. The aseptic technique used then was inadequate. The largest number of patients needing peritoneal dialysis in one night that I recall was 14. Maintenance peritoneal dialysis was performed three days per week. After four days without dialysis patients smelt very uraemic.

Automated peritoneal dialysis machines were welcomed when they arrived. We were then able to send a few people home on these machines. Early days with continuous ambulatory peritoneal dialysis (CAPD) made us realise how

inadequate our sterile asepsis was with peritoneal dialysis. Gail Kominsky from Prince Henry's Hospital in Melbourne demonstrated their disconnection and line change techniques. It was a time for change and improvement.

It was the late 1970s before people with diabetes were considered for dialysis. It is hard to believe now that this did not routinely happen.

Haemodialysis at Sydney Hospital was via Milton Roys initially, with Drake Willocks for home haemodialysis patients. Acetate was used as the buffer. Most patients vomited during and after dialysis and suffered headaches and severe cramps, particularly if they exceeded their 500 ml fluid restriction. Fluid compliance was more common; I suspect because of the dire consequences of fluid removal of greater than 1.5 litres. Bicarbonate dialysis was a significant improvement. Fortunately, most patients received a cadaver transplant in a fairly short time. Hepatitis B outbreaks resulted in the dialysis unit being quarantined for six months (there was no vaccine) so dialysis had to be performed in the ward.

Access for haemodialysis relied on Schribner shunts. These were two pieces of silastic tubing joined by a connector; one piece in the artery and the other in the vein. The connection needed to be securely taped when not in use. Shunts occasionally came apart resulting in large amounts of blood and a moribund patient. Connection via the machine was achieved by clamping either side of the shunt and inserting a connector into the dialysis tubing. Arteriovenous fistulae and vein grafts were welcome improvements to this. Reuse of dialysers and at home dialysis lines also was standard. The dialyser was primed with formaldehyde in between dialysis and carefully labelled!

Home haemodialysis was a very important option. Anybody living in the country had to do home haemodialysis.

Home training at Duntrim was done in a wonderful old building bequeathed to Sydney Hospital, complete with swimming pool and tennis court. The Redy machine was a portable, if cumbersome, haemodialysis machine, relying on a sorbent cartridge to absorb urea. A few early patients used these to go away on holiday as there were very few haemodialysis units.

Industry were an important part of our information gathering and socialising. Jenny Cliff from Cordis Dow would wow us with her outfits, as well as her information. RSA conferences were very important for the exchange of ideas and experiences, along with some very active socialising.

Renal dialysis diets were simple – high protein, no salt or potassium. Meals were served by the nursing staff; breakfast comprised of a cup of cornflakes with approximately 80mls cream and toast. The renal dietician was part of the team, along with the social worker. I don't think the term allied health had been invented but these health professionals were an important part of the team then as they are now.

Research was alive. Properties of various dialysers were evaluated. Renal biopsies were performed and ANZDATA information was collected by the renal physicians.

On reflection I am in awe of how little we knew. The growth curve in medical knowledge in the past 30 years has been phenomenal. However, despite many new medications and classifications of diseases, outcomes are not significantly different for patients on dialysis. The treatment itself has been refined but not dramatically improved. We have a much better understanding of the dynamics of dialysis and nephrology as a whole but where to from here with an increasing number of ageing patients requiring major support from a health system with demands on it from all specialties and ages.