

## **St. Mary's Hospital, London**

**By Barry Hulme**

*(The pioneer role of St. Mary's hospital in transplantation is described in my memoir on the BTS website. This account by Barry Hulme supplements that story, particularly in respect to the development of haemodialysis there. Editor)*

In 1967, I was successful in my application for a Wellcome Senior research fellowship in Clinical Science and was appointed to the Professorial Medical Unit under Professor (later Sir) Stanley Peart at St. Mary's Hospital, London W2.

Stan Peart was the driving force behind attempting cadaveric renal transplantation in the early 1960's after the introduction of the immunosuppressive drug azathioprine. He "pressurised" Ken Owen as the urologist and Mr. Ian Kenyon as the vascular surgeon to perform the procedures but the rightly refused to care for the patients either pre or post operatively. The physician in care of the day-to-day care of the patients was Dr. (later Professor) James Mowbray, Senior Lecturer on the Medical unit.

A dedicated transplant ward was opened in 1966 with 6 single rooms for barrier nursing as well as a small operating theatre and an out patient clinic.

An analysis of 65 cases of cadaveric renal transplantation was published as the first paper in the first issue of The Lancet of 1969; the second paper in the same issue reported the results of cadaveric transplantation from Prof. Woodruff's unit at the Edinburgh Royal Infirmary. . One of the main problems was ischaemic necrosis of the donor ureter, since the

renal artery supplies the blood supply of the upper third of the ureter and initially, a too long segment was transplanted; there were also problems with perfecting the implantation of the donor ureter into the bladder.

The patients with chronic renal failure were maintained by regular intermittent peritoneal dialysis on general medical wards using the same rigid peritoneal dialysis catheters, connecting sets and sterile dialysis solutions as were used in the treatment of acute renal failure.

The transplant unit had access to “brain dead” young adults with head injuries at the neuro-surgical unit of the Atkinson Morley Hospital, Wimbledon. Dr. James Mowbray, physician, performed a single block removal of both kidneys, section of aorta and ureters from the donor after the cessation of circulation. Surgeons in the operating theatres at St. Mary’s Hospital dissected the individual kidneys, renal arteries and ureter and both organs were transplanted into two patients within a short time of the donor’s death. The recipients were selected on the basis of a compatible blood group, as tissue typing was unknown at this time.

In addition to patients referred directly to St. Mary’s Hospital, patients who had commenced dialysis in Belfast and at the RAF renal unit at Halton , were transferred to the transplant unit to await a suitable organ. Patients on regular haemodialysis at St. Mary’s Hospital, Portsmouth, continued on dialysis there and were transferred by car or ambulance when a suitable organ became available.

In 1968-69, James Mowbray moved to the new Department of Experimental Pathology under Prof. Kenneth Porter, and I was appointed in his place. During 1968, it became obvious the peritoneal dialysis was unsatisfactory for the treatment of chronic renal failure. The situation arose when a young woman was unable to continue of peritoneal dialysis following a severe peritoneal infection. I was told that Dr. Victor Wynne, had purchased his own Kolff twin-coil kidney machine and it

was lying unused in the hospital basement. Following telephone calls to Travenol laboratories for dialysers and blood lines, the patient was successfully maintained on haemodialysis until she received a renal transplant. This demonstrated that it was essential to establish a chronic haemodialysis programme. With the support of Prof. Peart and the hospital Executive Medical Committee I saw the Deputy Chief Medical Officer at the Department of Health. She agreed to fund the establishment of a standard 10-bed maintenance renal unit at St. Mary's Hospital. Space was found on the first floor of the old stables between Paddington Station and St. Mary's Hospital. While the building was being converted and equipped, the Department of Health provided two Lucas dialysis machines and the new unit was fully operational by 1971, providing 2-3 times weekly outpatient haemodialysis.