

Special Article

A Personal Reflection on the History of Renal Medicine in the Sudan

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In the year 1960, the visitor to The Faculty of Medicine University of Khartoum was Prof. Max Rosenheim from the University College Hospital (UCH) of London. The Students' Medical Society introduced him in a lecture on "Uremia." This title no longer appears in textbooks or articles on the subject of chronic renal failure or chronic renal insufficiency since retention of urea is neither the only consequence of loss of renal function nor necessarily always the most important one. However, Prof. Rosenheim gave, as expected, a magnificent display of the pathophysiology of renal failure and the logical approach to management placed on an understanding of the pathophysiological disturbances. I (then, president of the Students' Medical Society) do not recall that he elaborated or even mentioned dialysis or transplantation as firm cornerstones in the management.

Prof. Rosenheim went on to become Prof. Sir Max Rosenheim, President of the Royal College of Physicians and eventually Lord Rosenheim. The medical student who introduced him went on to become a nephrologist. He is now recalling some of the milestones in the development of nephrology in this country to which he has been witness.

In the year 1968 I was about to finish my training in Renal Medicine in the Royal Victoria Infirmary (RVI) Newcastle and the Royal Infirmary (RI) Edinburgh when I was informed that a Sudanese patient was returning from America and has a personal dialysis set up to be installed at his home in the Airport Neighbourhood (Hail Matar) of Khartoum. Mr Osman Awadalla supervised the management of this patient who unfortunately died not very long after returning to Khartoum. However the home and dialysis set up was the first dialysis unit in the Sudan. The dialyser was a Kiil. The unit was transferred to the Khartoum Old Hospital and furnished with more Kiil dialysers, a set up for peritoneal dialysis (PD) and a chemistry laboratory donated by the family of Korkain Eskendrian. The unit was supported by a donation from East Germany. Mr Osman Abdel Karim and myself enjoyed a training period in East Berlin.

When I returned from my training abroad, some years ago, I will not say how many, I started talking about nephrology as a growing specialty in medicine. The late Prof. Bayoumi, a splendid surgeon, used to have difficulty in remembering the term, and whenever we met in the corridors of the Khartoum Hospital he will ask me: Abdel Rahman, what did you say your specialty was?



In 1974, Prof. Omer Belail, Mr Osman Awadalla, Mr Osman Abdel Karim on the surgical side and Dr Hasan Abu-Aisha and Dr Abdel Rahman Musa on the medical side conducted the first renal transplantation, supported by colleagues in anaesthesia, radiology, pathology, microbiology and a dedicated nursing staff. The Renal Unit in the Khartoum Old Hospital remained the main Dialysis center for some years, offering PD probably more efficiently than hemodialysis (HD). This is reflected by a paper published in International Surgery. [1]

The year 1985 saw the establishment of the Khartoum Dialysis center as an enterprise between the Department of Medicine, Faculty of Medicine of the University of Khartoum and the Nimeri Kidney Patients' Friends Society. Sayed Izzel Din Elsayed and Elias Elamin contributed much to the donation of the building, the ambulance and securing the donation of four HD machines and supplies by Khidir Elshareef. The Society continued to give support and donations to the center. The first director was Dr Omer Abboud, succeeded by the late Dr Salma Suleiman. She and a cluster of dedicated men and women were lost in a tragic incident on the Nile. To them is attributed the outstanding development in the Khartoum Dialysis Center, now re-named Dr Salma Suleiman Dialysis and Transplantation center.

The mid seventies witnessed the introduction of renal biopsy as an investigative procedure. At the beginning we used the Vim Silverman needle. This is a stout and

robust needle which called for some courage on the part of the operator, let alone the patient. We soon turned to a modified Mengini needle (Kerr's modification). Now more refined biopsy needles are in use. To locate the site for the puncture we employed a rather primitive technique. An iron grid is placed on the back of the patient overlaying the kidney area while an intravenous pyelogram (IVP) is being done. The squares on the grid are then marked on the skin and the appropriate site is selected. The clinicopathological renal biopsy sessions with the collaboration and guidance of Prof. Ahmed Mohammed EL-Hassan (an enterprise we both inherited from our training in Edinburgh) proved a very fruitful exercise for the benefit of patients and purpose of research. We were then able to report on various aspects of renal pathology. Further publications followed and more recent techniques of studying biopsy material are now employed. Plenty of academic research was also produced along with several dissertations.

The Sudanese Nephro-urological society was formed in 1985 and more recently, the Sudan Society for Kidney Diseases and Transplantation reflect the growing professional interest in this field.

Further professional staff training in renal medicine started in the mid seventies. This was mostly based in the UK but also a few received training in Sweden. It included both physicians and nursing sisters. We are indebted to Prof. DNS Kerr in Newcastle-upon-Tyne and Tony Martin in Sunderland, for offering training posts and supervising training. The Gambro Company also facilitated training both in the UK and Sweden. Unfortunately most of the highly trained sisters are now working abroad.

References

1. Beileil OM, Bushara M, Musa EM, Awadalla O. Acute therapy in chronic renal failure. Dialysis experience in Sudan. *Int Surg.* 1975 Sep;60(9):470-2.