Nephrology Dialysis Transplantation

The First Twenty-five Years

The Founding of the EDTA: Facts and Lessons

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Introduction

Thomas Graham [1], the originator of the concept of dialysis, predicted in the mid-19th century that some of his findings could perhaps be applied to medicine, and John Abel [2,3] was anxious to try this 'vividiffusion' apparatus in patients with failing kidneys. But he never did.

The credit for the first human dialysis (1924) goes to Georg Haas [4,5] from Gieszen, near Frankfurt, Germany. He convincingly demonstrated that extracorporeal dialysis in human patients was feasible but his dialyses were too short and his dialysers were rather inefficient. His results were therefore disappointing, and his work remained largely unnoticed and was soon forgotten.

Monsters to Tame

The rotating dialysis machine constructed by Kolff (Fig. 1) and Berk in 1943 [6,7] was the first model of an 'artificial





Fig. I.

Fig. 1. Willem Johan Kolff (1964).

Fig. 2. Bruno Watschinger from Linz (Austria) with his prototype twincoil dialyser (1955).

Fig. 2.

kidney' that in practice appeared to be suitable for human application, but the apparatus was extremely difficult to operate. Its successor, however, developed in 1955 by Bruno Watschinger (Fig. 2) from Linz, Austria together with William Kolff [8,9] the twin-coil machine, (also 'a monster to tame' to use the words of David Kerr [10]), revolutionised the treatment of acute renal failure.

Dialysis Therapy in End-stage Chronic Renal Failure

For the successful treatment of irreversible end-stage chronic failure we had to wait another five years, until Scribner and his co-workers from Seattle, USA presented [11–14] their reports on regular dialysis treatment at the ASAIO meetings at Chicago (1960) and Atlantic City (1961).

An Unannounced Visit from an Unknown Gentleman

While dialysis in the early 1960s had already started to revolutionise therapy and prognosis of acute renal failure and of end-stage chronic renal disease, nephrology was still in its infancy.

It was in May 1960, one day before the start of a symposium on water, electrolyte and kidney disorders in Amsterdam [15] that an unknown gentleman pushed my front doorbell button, rushed into the house, briefly mentioned his name and apologised for his unannounced visit. He hurriedly asked for me and a slide projector. The stranger found both in my study and with this he showed me his new invention (Fig. 3[16]), which he wanted to present at the symposium, asking my assistance in getting this included in the programme. Of course Stanley Shaldon (Fig. 4) got his way, and it was also the beginning of a lasting friendship.

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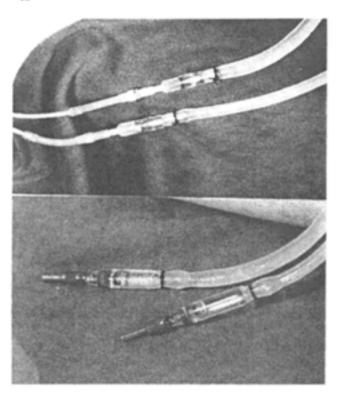


Fig. 3. Stanley Shaldon's 'new invention': silastic heparin infusors connected to indwelling vena cava catheters (1960).

In the meantime, nephrology and dialysis technology had started to grow and Stanley, then in charge of the renal unit at the old Royal Free Hospital in London, thought that a symposium on dialysis and acute renal failure could be very instructive.

The Royal Free Symposium on ARF [17]

We met on the 2 September 1963 at the lecture theatre of the old Royal Free, by some called 'the Barn' or 'the wooden hut on the roof'. It was a very successful meeting and at the end it occurred to me how profitable the symposium had been and it became clear how much an annual meeting like this could contribute to our knowledge. After the symposium a supper was held in the ancient hall of the Society of Apothecaries. After enjoying several glasses of excellent Bordeaux and a glass of port, I introduced myself to Professor Sheila Sherlock, Stanley's professor of medicine, who had chaired the symposium. I briefly told her that I had a plan to found a European dialysis association, inviting her to chair a similar symposium in Amsterdam the following year. Her reply was brief-Sheila was a no-nonsense, Thatcher-type lady: 'Sorry sir, you are talking to the wrong person. I am a liver professor. You should look for Stanley Shaldon and David Kerr from Newcastle who are both kidney men'. I found them in the after-dinner crowd and both seemed in favour of the



Fig. 4. Stanley Shaldon (1964).

idea. After coming home we started to communicate with each other and with several others from different European countries whom, we expected, would be interested.

The Founding Meeting in Amsterdam

It was on Thursday 24 September 1964, that some 30 delegates from different countries were invited to a founding meeting which was held at the Queen Wilhelmina Hospital of the University of Amsterdam (Fig. 5). This, therefore, is the reason why now we celebrate the 25th anniversary of our Association.

A Wrong Name and a Lesson . . .

Initially the idea was to establish a small association with a limited number of active members from a few countries. A provisional name of West European Dialysis Association (WEDA) was coined. Professor Richet (Fig. 6) of Paris, however, suggested that a WEDA would raise suspicions of being politically biased and that was of course unacceptable. A decision was then made that a scientific European society for dialysis and transplantation should be founded, with a membership open to medically and non-medically qualified scientific workers in the field of



Fig. 5. Participants in the first EDTA congress at Amsterdam (1964).

interest of the association who were working in Europe and adjacent territories.

The First Meeting [18,19]

About 200 delegates and a number of guests met the next day in the lecture theatre of the department of medicine at the Queen Wilhelmina Hospital. Some 34 papers, a number of demonstrations and films were presented, and a technical exhibition was arranged in an adjacent area.

William Kolff [20] presented a paper on 'Life without Heart and Kidneys'; according to many this was somewhat too futuristic. Currently, however, life without kidneys offers few problems, although living without a natural heart is possible only for a limited period of time.

Sergio Giovannetti (Fig. 7) from Pisa reported on his studies on the treatment of uraemia with a special lowprotein diet [21]; it is interesting that even today the debate continues regarding the place of protein restriction in slowing down the progression of renal failure.

Jean Louis Funck-Brentano (Fig. 8) and co-workers from Paris described the importance of nerve conduction velocities as an assay of the adequacy of regular dialysis treatment [22].

Hippocrates Yatzidis (Fig. 9) from Athens gave his classical presentation on direct haemoperfusion [23]. In all, the meeting was a considerable success, and in





g. 6.

Fig. 7.

Fig. 6. Professor Richet of Paris (1964): "WEDA [West European Dialysis Association] raises suspicions of being politically biased"....

Fig. 7. Sergio Giovannetti (Pisa. Italy (1964)): a special low-protein diet.

addition to those already mentioned was attended by other celebrities (Fig. 10a-c) such as Sir Douglas Black (Manchester), Sir Hugh de Wardener (London), Jim Robson (Edinburgh), Jules Traeger (Lyons), and Emilio Rotellar (Barcelona).





Fig. 8. Fig. 9.

Fig. 8. Jean Louis Funck Brentano (Paris (1964)): motor nerve conduction in dialysis patients.

Fig. 9. Hippocrates Yatzidis from Athens, Greece, who originated haemoperfusion.

The Dinner at Amsterdam in 1964: Another Lesson

Following the symposium, delegates and their accompanying guests were invited to dinner at the aristocratic Groote Club in Dam Square, Amsterdam. The dinner was sponsored by the Dutch Ministry of Education and Science. It was an evening full of rattling fun, possibly because the inexperienced organiser had failed to limit either the number of drinks or the number of bottles of wine. Several years later, the auditors of the Ministry checked the accounts of the young society and noticed that the cost of the dinner had considerably exceeded the budget and we had to refund the excess. This nearly caused the premature bankruptcy of the financially still vulnerable association.

The First Year

Stanley Shaldon, David Kerr and Jørn Hess Thaysen from Copenhagen (Fig. 11a-c), the latter representing the Scandinavian countries, and I met later that year in the basement of the Regent Palace Hotel in London. A



Fig. 10a-c. Celebrities at the founding meeting: (a) Sir Douglas Black, (b) Sir Hugh de Wardener, (c) Dr Jim Robson. (right)



Fig. 11a-c The other founding members: (a) David N. S. Kerr (1986); (b) Jorn Hess Thaysen (1985): (c) William Drukker (1985).







constitution was drafted and Stanley contrived a new name: the new Society became the European Dialysis and Transplant Association (EDTA). A logo was designed for the new Association a few weeks later at my desk at home. It was neither beautiful nor original. The somewhat cryptographic antique symbols were from a book by Weisberg from Chicago which indicated:

 $\nabla = \text{water}, \ \Theta = \text{salt}, \ \Omega = \text{acid}, \ \aleph = \text{alkali}$

The Second Congress

The new Association held its second congress in Newcastle-upon-Tyne in September 1965 under the presidency of Mr John Swinney, a noted Newcastle urologist and a renewed pioneer in the field of transplantation; the 'T' in the society has always been important, even from the earliest days.

Childhood Diseases

At that time Jean Hamburger, head of the powerful and influential Necker Hospital nephrology group in Paris, was busy establishing the International Society of Transplantation and he feared competition from the new Association, but his vigorous attempts to remove the 'T' of Transplantation from EDTA failed. However, in 1967 the new International Transplantation Society, by surprising coincidence, had scheduled its first Congress in Paris on exactly the same days as the fourth Congress of the EDTA in Copenhagen. This clearly could have adversely affected both associations, and a hectic time ensued for the President, Jørn Hess Thaysen, and the Secretary-Treasurer, travelling between Amsterdam, Copenhagen and Paris. Fortunately, at the last minute a compromise was reached as the EDTA relocated its Congress to Paris and changed its dates to avoid a clash of interests.

Surprisingly, at this Congress, Jean Hamburger presided at the annual dinner in the Pavillon d'Armenonville in the Bois de Boulogne. At dinner, he invited my wife, Mabel Mary (Molly) Lely to be his partner and Mina Hess Thaysen to be the other guest of honour (Fig. 12). Mina, a professional singer and singing teacher to the Danish Royal Family, and Molly enjoyed the food but found the occasion rather formal. Mina, without warning, took a microphone and invited everybody to join her in communal singing, starting a popular song. But nobody joined in ... Molly then tried to liven the evening by pinning a popular nonsense badge—'Kiss me I'm sweet'—on Jean Hamburger's lapel, but again nobody responded. Many, Mabel Mary's husband included, were shocked and somewhat embarrassed, but no harm was done: Hamburger



Fig. 12. At the 1967 annual dinner at the Pavillon d'Armenonville in the Bois de Boulogne in Paris. Left to right: Mabel Mary Lely (the spouse of the Secretary-Treasurer). Jean Hamburger and Mina Hess Thaysen (the spouse of the then president of the EDTA).

took the joke like a good sport and calmly removed the badge from his jacket.

An Important Decision

Notwithstanding some financially critical years and some controversies and disagreements, political and otherwise-more or less the common childhood diseases-the Association survived its infant years and began to grow and gain prestige. At its first Congress in 1964 a most important decision was taken, that there should be established a registry of all European patients on replacement therapy for renal failure. In this way the EDTA Registry became a unique enterprise in the medical world and a rare example of international co-operation. In 1965 the first Registry Report was devised in a rather primitive way in my home in Amsterdam: all returned questionnaires were spread out on the floor of our front room. We had to walk carefully on our toes or to creep on all-fours between the precious data sheets, keeping our beloved dog out of the room. Tony Wing, who later became the Registry's director, still considers the floor of that room an holy

Twenty-five years ago electronic data processing was still beyond the horizon. None the less, a report was derived: a rented mechanical calculator was a noisy but helpful piece of equipment. At the second Congress in Newcastle in 1965 the first report on dialysis was presented [24], with data on 271 chronic patients from 41 European centres. Of these 271 patients, 160 were alive. In 406 W. Drukker



Fig. 13. Frank Parsons from Leeds, UK presented the first Registry report on transplantation in 1965.





Fig. 14.

Fig. 15.

Fig. 14. Hans Gurland (1965) from Munich FRG, computerised the annual Registry Reports and was chairman of the Registry from 1971 to 1976.

Fig. 15. Vittorio Andreucci (1976) from Naples, Italy, a long-term dedicated member of the Association.

addition Frank Parsons (Fig. 13) reported that 258 renal transplant operations had been performed in Europe and details regarding 187 patients were presented [25].

In 1971, after some disastrous efforts to computerise the Registry data with the assistance of mathematicians from IBM, both dialysis and transplant reports were successfully integrated and computerised by Frank Parsons and Hans Gurland assisted by Dr Härlen, who was a professor of mathematics at Munich University.

Hans Gurland (Fig. 14) chaired the Registry Committee from 1971 to 1976, when Tony Wing took over and became the first director of the Registry. Neville Selwood from Bristol provided computing expertise. Under Tony's directorship the EDTA Registry became the proud owner of a powerful computer, which, in 1986, provided data on patients from 2065 European centres, 82% of all centres known to the Registry, having a database of more than 111 300 European patients living with the support of either dialysis or a functioning transplant.



Fig. 16. The two secretaries at the Queen Wilhelmina Hospital on 24 September 1964, 7.30 a.m. during the calm before the storm. Ms Ida Paumen (left) and Ms Gerda Kaandorp (right).

It is with admiration that 1 acknowledge the four wizards, Frank Parsons (Leeds), Hans Gurland (Munich), Tony Wing (London), and Felix Brunner (Basel) who, with the other members of the Registration Committee and with the assistance of Miss Sheila Dykes, made the annual Registry Reports so successful and world-famous.

Perhaps more than any other scientific medical society the EDTA has, from its very early days, been a large family and I think that it remains so. I would like to mention a few members but I recognise that this is selective and by no means exhaustive. David Kerr (Fig. 11a) has remained a very staunch supporter of the Association. He is a man dedicated to his patients, to medical science and research, to teaching and training and in particular to the EDTA. Stanley Shaldon is a most versatile man with a sharp tongue, having brilliant ideas and often feared in our scientific discussions and business meetings. Vittorio Andreucci (Fig. 15) has given long and loyal service to the Association, both as Secretary-Treasurer and subsequently as President. I should like to mention many, many others and to include their pictures, but space does not permit.

Associations, however, need more than just members. Without Molly, my wife and my two secretaries from the mid-sixties, Ida Paumen and Gerda Kaandorp (Fig. 16), the founding of the EDTA would have been impossible. I would advise that if ever you plan to found another association, look for two excellent secretaries who are essential and indispensable for the work, and obtain the support and enthusiasm of your wife.

It occurs to me that the EDTA-ERA is in good hands with its present President and Secretary-Treasurer assisted by experienced members of Council. I wish the

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Association continued healthy growth and progress in all its scientific activities. And I end this brief historical review by congratulating the Association on reaching its Silves jubilee

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