book reviews

Sunday's child? A memoir

By Leslie Baruch Brent. Bankhouse Books, New Romney 2009. 308 pp. £15.99.

In one of the last Red Cross letters to England that Lothar Baruch received from Germany in 1942, his father wrote, 'You will make your way alright, you are after all Sunday's child', which signifies good fortune. Lothar, who was obliged to anglicise his name to Leslie Baruch Brent on joining the British army, was born in 1925 in Köslin, then a German town near the Baltic coast. He had a happy childhood until he went to secondary school where he was the only Jewish boy in the class and was increasingly subjected to bullying and humiliation. Fortunately, his father knew the director of the Pankow Jewish orphanage in Berlin who agreed to take the boy. Like all such organisations it was increasingly attacked by the mob, culminating in Kristallnacht at the end of 1938. As a result Kindertransports were organised to send Jewish children out of the country and, at the age of 13, Lothar Baruch was one of the first 200 children to leave Berlin for England. In all some 10,000 children escaped persecution in this way.

The legendary teacher Anna Essinger had had the foresight to transfer pupils and teachers from her progressive boarding school in Ulm to Bunce Court in north Kent in 1933. 'Here', says Brent, 'school made me an all rounder'. It not only provided him with an identity, but formed lasting friendships with people throughout the world, and acted thereafter as his surrogate home. From there he went as a laboratory assistant to a technical college in Birmingham, joined the Home Guard, and enlisted in the army at the age of 19 as 'a friendly alien'; he served in the infantry in different parts of Europe, ending as a captain in 1947. An ex-service grant enabled him to study zoology at Birmingham University, where he had a distinguished career, winning a hockey blue, getting the vice chancellor's prize for best student of the year, and achieving a good degree despite having to spend his last year as full-time president of the guild of undergraduates.

Fortune struck again: he was recommended by Rupert Billingham, a colleague of Peter Medawar, as a PhD student, and the three of them moved to University College London to study immunological tolerance. In a series of groundbreaking experiments they showed that suitably prepared mice would accept grafts from other strains; the sight of a white mouse with a patch of brown fur shown by Brent in a lecture announcing this in 1953 caused a sensation. 'It triggered an avalanche of research throughout the world', and Medawar received the Nobel prize with Macfarlane Burnet; he split the money with his two associates.

In 1969, Brent was invited to fill the Pfizer chair of immunology at St Mary's Hospital, and spent 21 years researching, teaching, attending conferences worldwide, and particularly developing an early clinical immunology department. In retirement he wrote a *History of transplant immunology*, which took six years, and this memoir, and sang in the Crouch End festival choir. A polymath of many talents and interests, his enthusiasms and opinions are impossible to catch in a short review. Read this fascinating memoir and be inspired by his zest for being.

One thing dogged his life and that was the recurrent pain of wondering what had happened to his family all those years ago. The last Red Cross message in October 1942 ended ominously: 'we are going on a journey', and he suspected that they had been sent to a German concentration camp. He was able to return to his family home in the 1980s and 1990s at what is now Koszalin in Poland, but it was not until 'just a few years ago' that the grim truth was revealed in a visit to the Berlin archives. The names of his mother, father and sister were listed among the 900 people in the desperately overcrowded cattle wagons of Transport 44 that left Berlin on 26 October 1942. It arrived in Riga, Latvia, three days later, and the occupants were immediately taken to the local woods and shot.

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Diabetes: the biography

By Robert Tattersall. Oxford University Press, Oxford 2009. 229 pp. £12.99.

Diabetes is an ancient disease, yet any understanding of its cause has evolved only since the late 19th century, while its treatment and that of its complications belongs exclusively to the 20th century, representing an extraordinary story of high-quality basic science and astute clinical observation.

The discovery of insulin in 1921 instantly changed a fatal disease into a chronic disease requiring lifelong treatment. The award of the Nobel prize to Frederick Banting and JJR Macleod (1923) for this achievement was followed by five further Nobel prizes during the subsequent decades. It was awarded to Bernardo Houssay (1947) for his work on the effect of pituitary hormones on insulin sensitivity; twice to Frederick Sanger (1958 and 1980) for his work on the structure of insulin; to Dorothy Hodgkin (1964) for elucidation of the crystalline structure of insulin; and to Rosalyn Yalow (1977) for studies on the immunogenic properties of insulin leading to methods for its immunoassay (and that of many other hormones). These achievements occurred almost simultaneously with remarkable clinical developments. Thus, foetal mortality in diabetic pregnancy, initially between 50% and 70%, was gradually reduced to less than 2%; mortality from diabetic ketoacidosis from 50% to a negligible percentage; and blindness, renal failure and amputation rates all decreased. The stories behind these achievements and many others must thrill both those with the condition and indeed any health professional.

The diversity of the mode of discoveries alone engenders the greatest interest. For example, the casual observation that

sulphonamides caused hypoglycaemia yielded the development of sulphonylureas, still a mainstay of treatment for type 2 diabetes. Angiotensin-converting enzyme inhibitors which have alleviated the burden of nephropathy were developed from Brazilian viper venom; while photocoagulation to prevent blindness evolved from observing retinal burns occurring in people looking at the sun, and indeed the earliest clinical photocoagulations used the sun as the light source for treatment.

Treatment disasters, however, were not unknown. The earliest sulphonylureas, carbutamide, caused several deaths, as did phenformin (from lactic acidosis), while troglitazone caused liver damage. The use of pituitary ablation in the treatment of proliferative retinopathy was a complete disaster causing both severe morbidity and death. The huge but seriously flawed University Group Diabetes Programme study (UGDP) during the 1960s incriminated tolbutamide as a cause of death, almost led to the extinction of sulphonylureas, and resulted in years of controversy.

Media exaggerations and distortion of events have throughout history led to false expectations by a gullible public, who 'must have found it difficult to distinguish truth from fiction'. One newspaper hailed the discovery of insulin (1921) as a miracle with the headline 'Certain diabetes cure…all difficulties overcome'. Again, following the major scientific achievement of manufacturing insulin of human configuration, the pharmaceutical industry advertised to doctors that it was 'identical to the body's own insulin and therefore the logical choice' – a very successful campaign without any evidence for the claim. The introduction of tablets for the treatment of type 2 diabetes led to newspapers creating 'false hope that diabetes was now easy to control because tablets were available'. Fantasies continue to be published to this day, for example 'Drinkable insulin breakthrough', a headline published by the *Scotsman* as recently as 2002. It seems too much to ask for accurate, responsible reporting, even now.

Throughout this book, Robert Tattersall's understanding of patients' perceptions is palpable, no more so than when he observed that the innovation making the greatest difference to the lives of patients was not so much the introduction of human insulin, but the spread of diabetes specialist nurses. Diabetes led the way in the evolution of the specialist nurse as early as the 1950s, and most other specialties have followed suit since that time. Nurses both listen and provide ample consultation time which doctors might try to emulate and, indeed, Tattersall writes 'that the doctor must have close acquaintance with his patient and give ample time to his problems'.

As a lifetime diabetologist, I thought I knew my history of diabetes pretty well. But this book skilfully brings to light many gems of information probably unknown to most of us. While the book is nicely produced, illustrations are few and of poor quality, the index perhaps deficient, but the glossary and extended reading list are excellent. Anyone interested in medical discoveries, lay or professional alike, would read it with pleasure.

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