Brazilian Nephrology pays homage to Peter Brian Medawar

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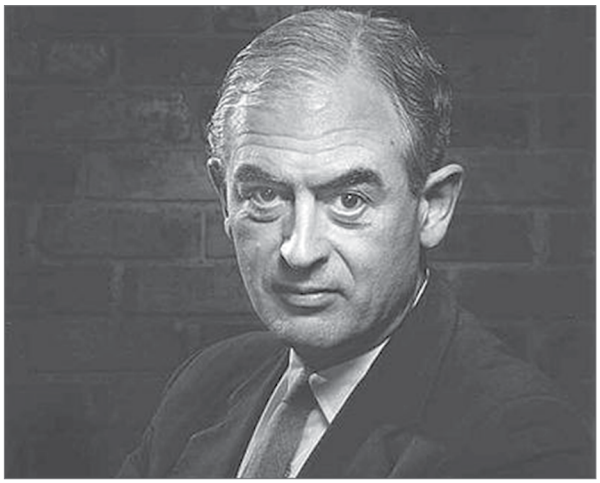
"The human mind treats a new idea the same way the body treats a strange protein; it rejects it."



On February 28, 2015, we celebrate the centenary of the birth of Peter Brian Medawar, Brazilian born, who became one of the greatest scientists of the twentieth century, and he received the Nobel Prize for Medicine in 1960. Peter was born in Petropolis, state of Rio de Janeiro, which conferred him Brazilian citizenship. His father, Name Medawar, Maronite Lebanese, made his fortune in England manufacturing dental and optical instruments. His mother, the English Edith Muriel Dowling, came with her husband to the Rio de Janeiro in 1913 to open a branch of the English Optics (Óptica Inglesa). The Medawar family kept homes in Copacabana and in Petropolis. Peter was born in the Imperial city (founded by Emperor Pedro II) at 17:30 of 02.28.1915, as stated in the civil registry of March 10 of that year, in the local register office. In his memoirs[1], the researcher recalled how much he liked rice, beans and manioc flour, prepared by his nanny, Dina, who lovingly cared for him and his siblings, Philip and Pamela. Peter was also registered in the British Consulate in Rio de Janeiro, and he lived in Brazil until the age of 13, when he went to England following his sister Pamela, for his studies in high school. Pamela became the wife of Sir David Hunt, private secretary to Winston Churchill and Ambassador of England in Brazil between 1969 and 1973.

Peter stood out early in biology and devoted himself to research. When he came of age, he was granted a British government scholarship. He asked his godfather, then Minister of Aviation, Salgado Filho, for exemption from compulsory military service in Brazil. Getúlio Vargas's Minister of War, General Eurico Gaspar Dutra, did not grant the claim of the young citizen from Petropolis. These circumstantial issues caused Peter to lose his citizenship and Peter's Brazilian nationality was never associated with his achievement.

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In 1935, Peter graduated in zoology from Oxford University. In the School of Pathology, he worked with Sir Howard Florey (Nobel Prize for Medicine in 1945). At Oxford, he met Jean Shinglewood Taylor, whom he married in 1937 and had four children: Charles, Alexander, Caroline and Louise. With only 24 years of age, he surprised everyone getting first place in a competition for the microbiology chair at Oxford.

Medawar's initial studies were devoted to cell culture and peripheral nerve regeneration. He pioneered the use of mathematical modeling in tissue culture, applying it to the analysis of cell growth, morphology and development. During World War II, he served at the Burns Unit of Glasgow's Royal Infirmary. The intense bombings in Britain caused many victims with extensive burns and the rejection of skin grafts was one of the largest medical care problems.

Medical knowledge at the time stated that the prevention of skin rejection was a matter of surgical skill. Studying grafted patients, Medawar demonstrated that skin graft rejection was fundamentally a biological problem. Studying the time to rejection and evaluating graft invasion by lymphocytes, he developed the theory of immunity for transplants. He was a pioneer in the mechanisms of acquired immune tolerance and immunomodulation with corticosteroids, which produced the first positive impact on the increased survival of renal transplants.

In 1960, in recognition for his outstanding scientific contribution, Peter Medawar received the Nobel Prize in Physiology and Medicine, along with the Australian Frank Burnet, for establishing the basis of immune tolerance and for creating the antilymphocyte serum, which definitely changed the history of post-transplant organ rejection. In 1962, he was appointed head of the largest medical research laboratory in the UK, the National Institute for Medical Research, and in 1965 received the title of Sir, granted by Queen Elizabeth II. He was also the founder and first president of the International Transplantation Society.

His research career was prematurely interrupted in 1969, on account of a stroke. In addition to abundant technical literature, Medawar wrote several books (only one published in Brazil*):[2] The Uniqueness of the Individual (1957), The Future of Man (1960), The Art of the Soluble (1967), The Hope of Progress (1972), Life Science (1977) Advice to a Young Scientist (1979), Pluto's Republic (1982); The Limits of Science* (1984). In 1986, he published his autobiography, a year before his death, the title of which highlights the contrast between his life with the physical limitations caused by the disease and his preserved lucidity: Memoir of a Thinking Radish. In 1961, the award-winning scientist returned to Rio de Janeiro, where he received the title of Doctor Honoris Causa from the University of Brazil (UB) - today UFRJ.[3] At the time, he stated that his return to Brazil, after so many years, was one of the greatest emotions of his life. Peter met with Brazilian scientists delivering two lectures, at the Brazilian Academy of Sciences and at the UB Biophysics Institute.

The State Medical Academy of Rio de Janeiro (ACAMERJ) created the Peter Brian Medawar Medal, as a way to honor the distinguished scientist and perpetuate his name in the Brazilian academia. In 1990, the Transplantation Society created the Medawar Prize, a tribute to its co-founder, considered one of the world's most prestigious scientific prizes, already awarded to the highest academic contributions in immunology and transplantation.

On the centenary of his birth, all tributes to the memory of Peter Brian Medawar will be fair and well deserved. The Brazilian Society of Nephrology could not refrain from expressing its appreciation and pay tribute to Peter Medawar, a native Brazilian, who with his exceptional intellectual capacity decisively contributed to change the history of medicine.

References

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