

Who Was The First Observed Sickle-Cell Patient?

Did you ever wonder who the first sickle-cell patient was observed by Herrick and Irons? The original 1910 paper, as is typical in clinical reports, preserves the anonymity of the individual, while describing as much of his family history and background as was deemed necessary for the work-up of the case. Almost 80 years later two medical historians traced back to find out who the young dental student was that Herrick described (Savitt and Goldberg, 1989). It is a fascinating and poignant story.

Walter Clement Noel had come to the United States from Granada, a small island (19 km wide and 32 km long) 160 km off the Venezuelan coast, in 1904, to study medicine at the Chicago College of Dental Surgery (CCDS). Changing race relations in the United States had reached the point that blacks could be admitted to universities and professional schools, though this was still the rare exception. But Noel was an exceptional young man, raised in a well-to-do Barbados family, and with a solid education behind him. But he was already suffering from the clinical symptoms of sickle-cell anemia when his boat docked in New York, and he was treated on arrival for severe skin lesions, pains throughout his limbs and joints, and shortness of breath [see Herrick's description (1910)]. After recuperating in New York for a week, Noel went on to Chicago to undertake his studies.

The symptoms continued, as described in Herrick's paper, from the fall of 1904 through his graduation from dental school in 1907. Irons, an eager resident, followed up on Noel during his entire three years in dental school, but then lost touch with him once he left Chicago. It was only in 1910, three years after last seeing Noel, that Herrick, with Irons' assistance, prepared the report for *Archives of Internal Medicine*.

The Noel family had inherited a large estate from Walter's mother, and grew there a variety of tropical agricultural crops. Mary Justina Noel's father had descended from west African slaves brought to the Dominican Republic (British West Indies) in the eighteenth century. The family could thus well afford to send Walter to dental school in the United States. Once in Chicago, he could also afford to go to the privately-run Frances Willard

Hospital instead of the public-run Cook County Hospital where most American blacks and other poor were seen as charity patients. At Cook County, Herrick and Irons would have had such a large case load they would probably not have been able to do the detailed follow-up work on Noel that was possible in the less crowded conditions of a private facility. Thus, had Noel come from a typical African-American background at the time, his condition might simply have been chalked up to syphilis or parasitic infection, and remained unnoticed. In such ways social factors can influence the course of science and medicine.

After graduating from dental school in May, 1907, Noel returned to Barbados, to open a practice. Barbados was at the time controlled by the British (it had been exchanged several time between Britain and France since its settlement in 1650), and Noel was the second professionally-trained dentist to practice in the capital city, St. Georges. He set up an office and his own dwelling, in a building his mother owned, was able to buy his own equipment, and practiced for the next nine years. He was described by one of his patients as "smartly dressed, healthy looking, and plump, with dark coffee-colored skin, a round fat face and a good body" (Savitt and Goldberg, 1987: p. 270). There is no record of his having married or had a family. He was fond of horse racing, and in early May, 1916, had attended a race on the other side of the island, returning home in the same day. After taking a bath he felt chilled and went to bed. He died on May 2, 1916, from what the attending physician diagnosed as pneumonia. He was 32 years old. Noel never knew his case had been written up by Herrick, nor did Herrick and Irons ever learn the whereabouts or fate of their famous patient.