

A HISTORICAL SKETCH; LIFE AND TIME OF JONATHAN HUTCHINSON (1828-1913), THE FIRST SARCOIDOLOGIST

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ABSTRACT. In the years preceding and following the turn of the 19th century several publications appeared independently that drew attention to what is now regarded as sarcoidosis. The first recorded and illustrated example is attributed to Jonathan Hutchinson of London. It appeared in *Illustrations of Clinical Surgery* (1877). (*Sarcoidosis Vasc Diffuse Lung Dis* 2008; 25: 71-75)

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THE BEGINNING

In a big red house known as Quay House lived Jonathan Hutchinson of Selby and his wife Elizabeth Massey. He was a devout Quaker and a flax merchant whose business partner was considered to be the richest person in the town. It was the business that brought him to Selby, a prosperous town located on the bank of the Ouse River in Yorkshire. The couple had twelve children; the second son, Jonathan Hutchinson, subject of this essay, was born on July 23rd, 1828.

EARLY EDUCATION

From the beginning Jonathan Hutchinson was exposed to warm glowing affection. Because the family was Quaker, Jonathan never went to boarding

school, but received a good education at home where the intellectual environment was suffused with reform movements of all sorts, with temperance teachings, and with discipline of life that emphasized individual conscience. The education he received appealed to reason, not to human prejudice. At the age of 17, Jonathan was apprenticed to Caleb Williams, apothecary and surgeon, at York. There was little in the family history that could have presaged the young boy's pre-eminence in science and medicine. Both on father and mother's side the family rose to wealth and social status brought about by industrial conditions of the 19th century. Nevertheless, Jonathan elected to become a doctor. At school his assiduous reading included French, Latin, German and Greek. He laid the Greek and German New Testaments side by side, in order to learn both languages while he read the English Bible. He enjoyed reading Montesquieu, Mirabeau, Pascal, Virgil, and Sallust for their teaching and their language; his favorite poet was Byron. One of the first entries in his diary January 21st 1846 is revealing, "Resolved always to do whatever I may have to do to the very best of my ability; believing it to be tolerably sure way of making gradual improvement." At school one of his closest friends was John Hughlings Jackson who became one of the most prominent neurologists of the era.

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In October 1846 Jonathan entered York School of Medicine. His Master provided him boarding and lodging and his father took care of his clothing and washing. In August 1846 he was offered the position of a house surgeon, during the absence of a regular man. It was two years before he obtained his diploma. He was just 20 years old.

THE LURE OF LONDON

In the spring of 1850 Jonathan Hutchinson moved to London to study medicine at St. Bartholomew's Medical School under James Paget. In August of that year he passed the examination for Membership of the College of Surgeons (M.R.C.S.) and in September he cleared the Licentiate examination at the Apothecaries Hall (L.S.A.). Thus qualified, he obtained the post of house surgeon at the County Hospital, York. Six months later he returned to London, determined to gain a special knowledge of diseases of the eye, and to this end he attended several hospitals with ophthalmology departments. During this time he was dependent on allowance from home, and in order to save his father expense, he sustained himself on a diet of bread and figs. While still a student at St. Bartholomew's Hospital he joined Moorfields Hospital for diseases of the eye. His inspiration in those early years was James Paget, a man of high principle and noble character, who also wrote for the medical journals, and lectured often in face of poverty and discouragement. Both Paget and Hutchinson were men of infinite patience and imperturbable calm. Paget's voice was soft and he spoke fluently. His speeches were delivered with an air of spontaneity but they were most carefully prepared beforehand. As an orator he had few equals. William Gladstone, British Premier, once said that he divided people into two classes—those who had heard and those who had not heard James Paget. His writings remain among the classics of medical literature. Hutchinson would later write, "To him (Paget) I owed my first introduction to work which enabled me to remain in London, and for long his relations with me were such that no elder brother could have exceeded in kindness. No expressions, which gratitude might prompt, could surpass by one iota that I honestly believe to be due to his intellectual attainments and moral worth."

MEDICAL PRACTICE AND ACADEMIC ACHIEVEMENTS

His first appointment in London was to the post of clinical assistant at Liverpool Street Chest Hospital. In July 1853, just 25 years old, he considered giving up general practice in favor of becoming a consulting surgeon and entering the higher ranks of the profession. His circle of acquaintances was widening. He wrote to his father, "I have become well acquainted with almost all who are noted in town for their professional attainments." There were a number of Members of the Society of Friends in the profession. Thomas Hodgkin was at Guy's and Joseph Lister, Wilson Fox and Buxton Shillitoe were at University College Hospital. In 1860 Hutchinson was appointed assistant surgeon to the London Hospital. Two years later he was elected Fellow of the Royal College of Surgeons (Eng.) and in the following year was appointed surgeon to the Moorfields Eye Hospital. At the end of 1852 he was elected a member of the Pathological Society, of which he became president in 1879.

He read his first paper before the British Medical Association in February 1855 on the Excision of the Elbow Joint. In same year he presented Dyspnea and Phthisis to the Hunterian Society and discussed Transmission of Syphilis from fetus to mother. In 1885 he presented two more papers at the Hunterian Society and introduced the "clamp". Every year after this, for the next 60 years, he was constantly before the learned medical societies of London with cases of special interest or new ways of operating. He was a keen debater with a marvelous memory of the cases that had come under care in the past.

THE PEN IS MIGHTIER....

In 1855 he obtained an appointment to the staff of the Medical Times and Gazette, a rival of Thomas Wakely's the Lancet. His principal income from 1855 to 1859 was from writing weekly columns to the Medical Times and Gazette, entitled Reports from the Hospitals. As reporter he attended all the most important cases and operations in the London Hospitals, and meetings of the medical societies. He reported the proceedings not only to the Medical Times, but also to the other periodicals.

Throughout his life his ready pen was ever ac-

tive in spreading the cause of knowledge. He edited the *British Medical Journal* for several years.

He wrote on every aspect of surgery and was undoubtedly one of the great figures of Victorian surgery. He published 10 volumes of *Archives of Surgery* in periodical form; all written by him.

PRIZES AND HONORS

In January 1865, Jonathan Hutchinson won the Astley Cooper prize of 300 sterling pounds for an essay *On Injuries of the Head and Their Treatment*, in which he described the original observation that in extradural hemorrhage due to tearing of the middle meningeal artery, as the compression of the brain increased, the pupil of the same side dilated and became increasingly inactive to bright light. This remains a helpful sign in traumatic extra-dural hemorrhage.

In 1864 he published in the *British Journal* a report in of five cases of true leprosy, "a disease rarely met with in this country and never arising here, Food is the most potent influence, the offending article; as the disease only occurs near the sea". Another condition that remains associated with his name is the 'Potato tumor' of Jonathan Hutchinson (carotid body tumor).

THE FIRST CASE OF SARCOIDOSIS

In 1869 Dmitri Mendeleev published the periodic table of elements; John Tyndall, one of Hutchinson's acquaintances discovered Tyndall effect, namely that a beam of light passing through colloidal solution can be observed from the side; Paul Langerhans dissected the pancreas and discovered the Islets of Langerhans; surgeon Johann Friedrich August von Esmerch demonstrated the use of a prepared first aid bandage on the battlefield. The first issue of the scientific journal *Nature* appeared. Clinicians remember 1869 for the contribution of Jonathan Hutchinson, who described a 58-year-old coal-wharf worker with purple, symmetrical skin plaques on the legs and hands that had gradually developed over the preceding two years. The lesions were neither tender nor painful. The patient also had suffered from gout and finally died of renal failure. Donald Hunter, a physician to the London Hospital in an informative historical review, suggested that this case might have

been of the same condition described subsequently as Mortimer's malady. In retrospect it was, most likely, the first case of cutaneous sarcoidosis; however, no such claim was made at that time. Hutchinson's other well-known case was a 64-year-old woman, Mrs. Mortimer, who presented with raised, dusky red skin lesions on the face and forearms. There was no ulceration, but some slight scaling. Six months later the lesions had increased in size and extent. The lobule of the ear became affected; the bridge of the nose became swollen, red, and hard. Hutchinson was careful to separate the new malady from tuberculosis, leprosy and all other forms of lupus lesions. He called it Mortimer's malady. The case was shown to a meeting of the Dermatological Society of London where it was decided that a biopsy should be obtained. The patient, however, did not relish the prospect of having piece of skin removed and promptly disappeared, robbing Hutchinson a priority in histological description of sarcoidosis granuloma.

In 1869, Hutchinson and Elizabeth traveled to Norway. He met the Norwegian doctors, who were interested in leprosy and other skin diseases. He enjoyed meeting Dr. Hansen of Bergen who was also interested in leprosy and in 1874 discovered the bacillus that caused it. Dr Bidentkap showed him a collection of pathological drawings in the University Museum. Among these was a patient of Professor Carl Wilhelm Boeck (1808-1875), a healthy Swedish sailor, who had skin lesions similar to those of John W- but he did not suffer from gout. Professor Boeck was an uncle of Caesar Boeck (1845-1917), who was later to make valuable contributions to the study of sarcoidosis. He coined the term "sarkoid" "because the lesion resembled sarcoma, but was benign".

HOSPITAL APPOINTMENTS AND SOCIETY MEMBERSHIPS

Hutchinson by now had become the best-known medical consultant in London because of his wide range of interests. He was a dermatologist at the Blackfriars Hospital for Diseases of the Skin, ophthalmologist to the Royal London Ophthalmic Hospital, venereal disease specialist to the Lock Hospital, physician to the City of London Chest Hospital, and a general surgeon to the London and Metropolitan Hospitals. His teaching abilities and

clinical observations were widely appreciated by the medical establishment. He became President of the Royal College of Surgeons (1889); President of the Pathological Society of London (1879); President of the Ophthalmologic Society of the United Kingdom (1883); President of the Neurological Society (1887); President of the Medical Society of London (1892); President of the Royal Medical and Chirurgical Society (1894-1896); and President of the International Dermatology Congress (1896) He founded the New Sydenham Society and acted its secretary from 1959-1907.

Sir Frederick Treves, a surgeon at the London Hospital, said, "Hutchinson was without a question a great teacher. He attracted, I believe, a large number of students to his demonstrations than any other surgeon of his time in London. He had a great following."

Medical students and clinicians all over the world know "Hutchinson's triad" of interstitial keratitis, labyrinthine disease and "Hutchinson's teeth". Less known are "Hutchinson's facies, the mask-like face in tabes dorsalis, and "Hutchinson's pupils", the unequal size of the pupils in the meningeal hemorrhage.

When he became an examiner at the Royal College of Surgeons, London, he decided that to be fair to the candidates he should ask each the same question; and he gave up the system reluctantly when he found that the outgoing candidates told the waiting students what the questions were.

Dr. Arthur Conan Doyle, Hutchinson's contemporary and the creator of Sherlock Holmes made a skin disease, most likely cutaneous sarcoidosis, a basic ingredient of the plot of a story, the Adventures of the Blanched Soldier. Whether or not Conan Doyle ever discussed patients with Jonathan Hutchinson remains unclear, but one can surmise that Doyle and Hutchinson must have met and exchanged ideas during one of the many London Medical Society Meetings. Hutchinson was a member and regular discussant at the meetings; whereas, Dr. Conan Doyle practiced at 2 Devonshire Street just a few steps away from 10 Chandos Street, the home of the Medical Society of London.

The American connection

Sarcoidosis was not included in the 1907 edition of Diseases of the Lungs written by Dr. Robert

Babcock and published by D Appleton and Company of New York. It was not to be seen in any of the editions of William Osler's Textbook of Medicine or in the tomes by Austin Flint and George Pepper. Nevertheless, the 14-year-old African-American admitted to the Johns Hopkins Medical Center, published in the American Journal of Medical Sciences, reported by Osler, had the likely diagnosis of sarcoidosis. The patient had bilateral parotid and lacrimal enlargement, lung disease, and pleural involvement. At autopsy, no evidence of tuberculosis was found. Nevertheless, there was a close relationship between Hutchinson and Osler, who often visited him at Haslemere. Osler was descended from an American branch of the Hutchinsons, of Lincolnshire. It is not certain if it is the same family as that of Jonathan Hutchinson, but, being Quakers of the same name, living within a dozen miles of one another, it is more than likely. Osler was instrumental in moving the valuable contents of Hutchinson's museum to The Johns Hopkins Medical School, Maryland.

MUSEUM

Hutchinson was an insatiable collector, and collected a vast number of specimens, colored drawings and charts. In 1888 he founded the Haslemere Museum and largely arranged it with the help of E.W. Swanton, the curator. Creating an educational museum was a unique effort for the time. The history gallery contained articles and illustrations of historical and archeological discoveries. There were statues and busts of people like Aristotle and Homer. A ghoulish Egyptian mummy, however, was the object of the most curious attention. Hutchinson lectured regularly at the Museum and covered a wide variety of topics. There were allusions to poets and poetry, writers, history, geology, zoology anthropology, and evolution. He showed specimens, described them, asked questions and held his audience in rapt attention.

THE MAN AND HIS HONORS

In his prime Hutchinson was described as being above middle height, possessing dark eyes that

seemed to look past one over his spectacles, black hair, and black beard. He was very kind and gentle. "Each Christmas he gave a grandchildren's party at which we were given extravagant presents. These were hidden around the rooms and we had to hunt for the one our name on it", recalled Margaret Hutchinson, one of the grand daughters. In 1882 he was elected a Fellow of the Royal Society. In 1908 he was knighted. Although years earlier he had refused a peerage.

THE END

In 1911 he retired from London and moved to Haselmere. He had ceased to lecture but continued to make observations and notes on the objects he found interesting during his strolls round his library. He was fond of shooting and swimming, and swam in a cold water pool in his grounds until nearly the end of his long life. On the evening of June 13th

1913, a month before his eighty-fifth birthday, he fell asleep, after several days of weakness and died peacefully at "The Library", Inval, Haselmere. He was laid by the side of his wife, in the corner of the old churchyard. His epitaph a quotation from Wordsworth "A man of hope and forward-looking mind" summarizes his life.

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