

John Zachariah Laurence: 'forgotten luminary'

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Abstract

John Zachariah Laurence was one of the four medical staff appointed in 1860 to the new "Hospital for the Paralysed and Epileptic," at 24 Queen Square, London. A prize-winning graduate of UCH he was known for his high intellect and skills in general surgery and in ophthalmology. After a brief period at Queen Square he left to found the South London Ophthalmic Hospital that became the Royal Eye Hospital, and the "Ophthalmic Review", the first British journal of ophthalmology; he later served at Barts. Highly accomplished in the arts, literature and research his achievements were sadly neglected by his contemporaries.



Figure 1: John Zachariah Laurence

Since its foundation, the Hospital for the Paralysed and Epileptic at Queen Square has appointed surgeons and ophthalmologists to its staff. John Zachariah Laurence (c. 1829 – 18 July 1870) was one of the four medical staff, and a board member appointed in 1860 to the new hospital at 24 Queen Square, London.¹ It began with a small working party and a public meeting at the Mansion House on November 2, 1859. Here it was resolved to set up a special institution in the fashionable Queen Square, to be called the "Hospital for the Paralysed and Epileptic," now National Hospital for Neurology and Neurosurgery. It had been instigated by Johanna, Louisa and Edward Chandler, and the Lord Mayor, David Wire.² It was prompted by the Chandlers whose grandmother had received poor, inadequate treatment for paralysis, and David Wire, who had himself recently been afflicted with a hemiparesis.

At the outset there were only four influential

medical staff: Jabez Spence Ramskill (1824-1897) the first physician,³ Charles Edouard Brown-Séquard,⁴ William Fergusson, Surgeon Extraordinary to Queen Victoria, and John Zachariah Laurence. Two years later Hughlings Jackson was appointed assistant physician; he was intellectually outstandingly original if eccentric, admired but not well understood in his time. Renowned for both original experiments and for his frequent peregrinations Brown-Séquard left in 1863, but the others have all but vaporised into the mists of history, their names now generally unknown.

In 1860, it was decided that a visiting surgeon should be elected to the hospital, and John Zachariah Laurence (Figure 1) was appointed. We can only assume that it was his academic brilliance and skills in general surgery and in ophthalmology that were valued in a hospital for nervous diseases. Laurence had started in surgery and became an ophthalmologist. He lived and practised at 30, Devonshire Street. In 1857 he became the founder, with assistance of Carsten Holthouse, of the South London Ophthalmic Hospital that became in 1892 the highly reputed Royal Eye Hospital. It opened with two beds in a house in St George's Circus, Southwark. Laurence's biographer, Arnold Sorsby was its first full time Professor in Ophthalmology.

Laurence was born into a middle-class Jewish family, his great-grandfather was an immigrant from Bohemia. He graduated from University College London in 1854 with several gold and silver medals and prizes.⁵ He became Fellow of the Royal College of Surgeons less than a year later. He trained in general surgery and published three much credited books and many papers.

He was surgeon at the Northern and Farringdon Dispensaries in 1855, and in 1858, Surgeon to the St. Marylebone General Dispensary. As a specialist in eye diseases, in 1864 he became founder and editor of the "Ophthalmic Review", the first British journal devoted to ophthalmology. He promoted the ophthalmoscope at Queen Square. He had successfully modified the binocular instrument of Giraud-Teulon and also invented a monocular ophthalmoscope. Laurence was the first to describe disciform degeneration of the macula in 1867, a decade before von Michel. In 1860 he described himself as Surgeon [Ophthalmic Surgeon]¹ to the Hospital for Paralysis [Queen Square]. His time at Queen Square was but brief, since his commitment to eye diseases led to his leaving to found the South London Ophthalmic hospital in a house in St George's Circus, Southwark. Towards the end of his career he was Ophthalmic Surgeon

to St. Bartholomew's Hospital, Rochester (1866-69) founded in 1078, the oldest hospital in England, until it closed in 2016.

What can we discover of Laurence the man?

Critchley related:

Laurence was a man of great gifts and versatility, a philanthropist, and a pioneer of new ideas. He was also a fine linguist, and was deeply interested in the Arts.¹

For reasons uncertain his work was undervalued as Arnold Sorsby's (1900-1980) belated obituary reveals:

Laurence was well and truly interred by his contemporaries. They had come to bury Caesar not to praise him. Eleven years later the existence of an Ophthalmic Review that he had founded and edited for nearly, four years (1864-7) but which had not survived longer than that, was not mentioned by its new editors.⁵

And he was described as:

A scholarly and wise man, and his intelligence and versatility served the hospital well at its inception. He may have helped to introduce the ophthalmoscope developed by Hermann von Helmholtz (1851) at Queen Square.² (p.363)

His name remains only in the rare, eponymous Laurence-Moon-Biedl syndrome. With his colleague Robert Charles Moon, his American house surgeon, in 1866 he described the syndrome:

Marian T., a fat, flat-framed, heavy looking child' with 'want of intelligence' and retinitis pigmentosa.⁶

Inheritance was autosomal recessive. He described a similar affection in three of her seven brothers, who in addition to the eye lesion showed peculiar bodily defects; they were all stunted, possessed of a solid, heavy countenance, mentally dull, and in addition showed remarkable under-development of the external genitalia. Re-examination, a few years later showed a spastic paraparesis. This picture of familial obesity, mental retardation, hypogonadism, associated with retinitis pigmentosa was completely forgotten until Bardet in 1920, and Biedl in 1922 described a similar disorder with polydactyly. This heterogeneous disorder bearing his name is caused by compound heterozygous mutation in the PNPLA6 gene on chromosome 19p13.

Laurence wrote three highly regarded books: *The diagnosis of Surgical Cancer*. (which won the Lister Prize) London, 1855; *The optical defects of the Eye*. London, 1865; and

A Handbook of Ophthalmic Surgery. London, 1866. In addition he published numerous papers (in the *British Medical Journal*, *Lancet*, *Medical Times and Gazette*, *Royal London Ophthalmic Hospital Reports*, and *First Ophthalmic Review*) listed by Sorsby.⁵ Of neurological interest were his: *The influence of the variations of the size of the pupil on the accommodating power of the eye*. *Glasgow Medical Journal* 1861; *On encephalocele, the history of a case with a tabular analysis of 75 cases*. *Medico-Chirurgical Transactions* 1856; *Encephaloid tumour of bone*. *Medical Times and Gazette* 1858; *On a case of encephalocele*. *Lancet* 1857.

Information about the life of Laurence is sparse. Indeed Julius Hirschberg in *The History of Ophthalmology* found him:

a noteworthy figure, a learned and inventive man, and one who had aspired to great things; it was a matter for regret that nothing concerning his life was to be obtained from the usual sources of reference.⁷

He was married to Miriam Solomon, at the West London Synagogue on August 9, 1854 and had three daughters and a son who died in childhood. Miriam died in 1863. Seven years later Laurence died after a protracted



Figure 2

illness, aged only 41 at St Peter's Square, Hammersmith, leaving one son and three daughters. He was buried beside his wife in the Balls Pond Road Cemetery (N.1) (Figure 2). The renowned Arnold Sorsby described him⁵ as 'versatile to a fault; he found relaxa-

tion in singing, music, drawing and fishing, and was a fine linguist and a scholarly writer.' The *British Journal of Ophthalmology* in 1932 belatedly portrayed him as:

One of those forgotten luminaries who shone brilliantly in his own day but whose career was so brief that he has all but been forgotten today.

REFERENCES

1. Critchley M. *The Beginnings of the National Hospital, Queen Square (1859-1860)*. *Brit Med J*. 1960;2:1829-37. <https://doi.org/10.1136/bmj.1.5189.1829>
2. Shorvon S, Compston A. *Queen Square A history of the National Hospital*. Cambridge University Press 2019. <https://doi.org/10.1017/9781316181430.002>
3. Lorch MP. *The Unknown Source of John Hughlings Jackson's Early Interest in Aphasia and Epilepsy*. *Cog Behav Neurol* 2004;17:124-132). <https://doi.org/10.1177%2F096772013479758>
4. Aminoff MJ. *Brown-Séquard a visionary of science*. New York : Raven Press, 1993. <https://doi.org/10.1097/0006123-199311000-00033>
5. Sorsby A. *John Zachariah Laurence- a belated tribute*. *Brit J Ophthalm* 1932;16(11):727-40. <https://doi.org/10.1136/bjo.16.11.727>
6. Laurence, JZ, Moon RC. *Four cases of retinitis pigmentosa occurring in the same family and accompanied by general imperfection of development*. *Ophthal Rev*. 1866;2:32. <https://doi.org/10.1002/j.1550-8528.1995.tb00166.x>
7. Hirschberg J. *The History of Ophthalmology 1899 to 1917, nine volumes*. (translated by Frederick C. Blodi. Bonn, JP. Wayenborgh. 1982.

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