Walter Cooper Dendy (1794-1871) and the First Book on Pediatric Dermatology

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'Some books are to be tasted, others to be swallowed, and some few to be chewed and digested'.

Sir Francis Bacon (1561-1626).

Sir,

A book is not always a mere storehouse of knowledge and information expressed in a meaningful arrangements of words forming sentences bearing sense and expressing the mind of the author and significance of the subject confined between two covers, but it may mark the beginning of an era or a subject or a specialty of knowledge. While commenting on the Willan’s book On Cutaneous Diseases, the first text book of dermatology in a modern sense, Professors Karl Holubar and Daniel Wallach wrote:... medals, appointments, concepts of the organic nature of the skin are all a bit ephemeral. A book is tangible—something to get your hands on.[4] True it is! Willan’s treatise (1797) marked the beginning of a new dermatology shedding its all old hues. A similar such epoch making phenomenon happened just after three decades when Walter Cooper Dendy published his A Treatise on the Cutaneous Diseases Incidental to Childhood in 1827 – the first book written exclusively on the skin diseases of children and is an incidence that marked the beginning of the journey of modern day Pediatric Dermatology. This present piece of article is a tribute to Walter Cooper Dendy and the first book on pediatric dermatology.

Literature on Pediatrics and Pediatric Dermatology before 1827

From the early days of the medical history attention was drawn towards the skin diseases of children. This is evident in the mention of vernix caseosa and some congenital disorders in the clay tablets of the Mesopotamian civilization of fourth millennium B.C. In India, a subject entitled Kaumarabhritya was dedicated to children in health and diseases much before the Christian era. It also described about various skin diseases of the children.[2] Rhazes (865–925), a physician from the Arabian world, was first to write a book on pediatrics named “Risala fi amraz ai-atfal aw ‘T’-ianaya bihim” or “The Diseases of Children.”[1]

The first book on pediatrics in English was The Boke Of Chyldren written by Thomas Phaer and published in 1544. All these books contained skin diseases in children as a division/chapter of the tome but it was the Dendy’s treatise that, for the first time, was solely dedicated to the subject of skin diseases related to children.[4]

Walter Cooper Dendy: A Man of Versatility

It was the first day of October of 1794 when Walter Cooper Dendy was born to Stephen Cooper Dendy and Marianne Dubbins at Sussex, England. He moved to London and started his studentship at Guy’s and St. Thomas Hospital during 1811. He became a member of the College of Surgeons in 1814 and started his medical practice at Stamford Street, Blackfriars. He was selected a fellow of the Medical Society of London and afterward became its president. Although he started his studies and career as a surgeon and worked as senior surgeon at the Royal Infirmary for Children in Waterloo Road for a long period of time, but as usual the creativity of a genius can never remain restricted to a specified boundary. His literary works like “Zone” — a poem and the book entitled the “Philosophy of Mystery” (1841) earned him fame in the field of literature as well as philosophy. He drew the illustrations for his own treatises. His various works like On the phenomena of dreams and other transient illusions (1832) and Psyche, a discourse on the birth and pilgrimage of thought (1853) are examples of his profound knowledge on psychology and parapsychology. He published a number of papers in psychology and anthropology journals. One of his famous article read before the members of the Anthropological Society on December 3, 1867 was the Anatomy of Intellect.[5] He was elected a fellow of the Anthropological Society of London in 1867 and read another famous paper Anthropogenesis in 1868 and criticized the Darwinian theory in sharp tongue whose abstract was published in the Journal of the Anthropological Society.[6] His studies on psyche, psychotherapy, and dream are one of the pioneering works on the subject. Dendy first coined the term “psychotherapeia” in his book Psyche: A discourse on the birth and pilgrimage of thought.[7] He had >15 works, mostly books apart from various lectures and papers in journals and topics ranged from pure literary work to medicine as well as psychology, parapsychology, and anthropology. He died due to cardiac problem at the age of 77 at Suffolk Street, London on December 10, 1871.[8,9]
Dendy and His Works on Diseases of Children and of Skin

It is a matter of fact that Walter C. Dendy started his journey as surgeon, but his inclination toward the child diseases and his long presence in the Royal Infirmary for Children in Waterloo Road enriched the medical world with his invaluable works on child diseases in the form of books like *A Treatise on the Cutaneous Diseases incidental to Childhood* (1827), *The Book of the Nursery* (1833), *Monograph I. On the Cerebral Diseases of Children* (1848), etc. Dendy was especially vigilant about the ailments of the skin and he maintained his own observations and he believed that most of the skin diseases are manifestations of the internal derangements especially that of the alimentary tract and digestive system. His works on the skin diseases were expressed in the form of books like *A Treatise on the Cutaneous Diseases incidental to Childhood* (1827), *Practical Remarks on the Diseases of the Skin* (1837), *Hints on Health and Diseases of the Skin* (1843), *Portraits of the Diseases of the Scalp* (1849), *The varieties of Pock delineated and described* (1853), etc.

**A Treatise on the Cutaneous Diseases Incidental to Childhood: The First Book of Pediatric Dermatology**

As already mentioned, Dendy was the first to write a treatise on skin diseases incidental to the children. The book, *A Treatise on the Cutaneous Diseases incidental to Childhood*, was published by John Churchill of the Leicester Square of London in 1827 in octavo format and printed by the I. Botson and Palmer Printers of the Savoy Street of London [Figure 1]. It was dedicated to J. H. Green, Esq. F.R.S., Professor of Anatomy to the Royal Academy and Professor of Anatomy and Surgery to the Royal College of Surgeons from whom the author learnt the subject in his early days of studies. The book contained 289 pages on the subject matter and the content showed six broad chapters including the introduction. It contained 24 color plates arranged in two pages each containing 12 plates arranged in four columns [Figures 2 and 3]. Each column contained three rows. The book starts with definition of terms frequently used in describing skin lesions, such as papulae, squamae, exanthemata, bullae, pustulae, vesiculae, tuberculae, and maculae. These definitions do not match much with the present definitions of the terms. In the introduction chapter, Dendy presumed that many skin diseases are manifestation of the derangement of the internal milieu, particularly secondary to the derangement of the intestine and next he discussed about classification and nosology in cutaneous disorders proposed by various authors such as Lorry, Rayer, Sauvages, Plumbe, Cullen, Alibert, and Willan. He appreciated the work of Alibert but with reservations, and followed mainly the Willan way. Dendy assumed intestinal derangement as the important cause of cutaneous disorders and argued that prevention of skin diseases was possible if alimentary ailments be controlled. Dendy described in detail about bathing and fumigation of the newborn. As about anatomy of the skin, he said that skin was composed of three layers: corium internally, cuticle externally, and rete mucosum forming the bond between the two. Nails were considered as part of corium. Impetigo was considered as noncontagious. Psoriasis has been confused with leprosy and leprosy has been described with peculiar symptoms like itch. Though most of the diseases mentioned by Dendy are known to us even today almost in similar names but some are not in vogue. As about the management, bloodletting and use of leeches for that purpose along with various chemicals used to prepare paste, ablutions, and oral medication including frequent use of laxatives to cleanse the bowel were mentioned in the book. On the whole, Dendy's treatise covered most of the issues...
related to skin diseases in children prevalent during that period with prevailing management options.[10]

Conclusion

The subject of skin diseases witnessed a period of renaissance from the middle of the eighteenth century and extended it pace for the next one hundred years. It was the period that viewed the activity of giants such as Charles Ann Lorry (1726–1783), Joseph Plenck (1735–1807), Robert Willan (1757–1812), Jean-Loius Alibert (1768–1837), and others. Willan was decorated with the John Fothergill Medal in 1790—an honor awarded for the first time in the history of dermatology. The first full chair of dermatology was established in 1790 at the University of Pisa, Italy.[11]

The concept of modern dermatology was, thus, in nascent stage and the subject of dermatology was just maturing from its infancy. In this situation, a book written exclusively on the pediatric dermatology is certainly unimaginable. It took about one and a half centuries to give birth to Pediatric dermatology “officially” (1972) after the publication of Dendy’s book in 1827. Hence, A Treatise on the Cutaneous Diseases incidental to Childhood (1827) should be considered as the landmark of beginning of the journey of modern day pediatric dermatology and the dermatology world should bow down before Walter C. Dendy who could foresee the future such a long time back.

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Conflicts of interest

There are no conflicts of interest.

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Sir,

I read the interesting case–control study by Okpala et al. [1] published in the July–August 2019 issue of the Indian Journal of Dermatology. The authors studied the prevalence of metabolic syndrome (MetS), dyslipidemia, and associated factors in a cohort of Nigerian patients with lichen planus (LP). They found an insignificantly increased MetS prevalence in LP patients compared with controls. However, dyslipidemia was associated significantly with LP. The family history of diabetes mellitus was an independent predictor of MetS in the LP patients. Patients with LP demonstrated a significantly higher serum level of low-density lipoprotein cholesterol, total cholesterol and triglyceride than controls. [1] The authors recommended that LP patients must be routinely screened for MetS and its components. [1] The authors mentioned one study limitation as the availability of fund was a significant factor that limited the sample size to the minimum. I assume that the following methodological limitation might additionally cast suspicions on the accuracy of the study results and recommendation. In the study methodology, the authors stated that MetS and dyslipidemia were diagnosed using the National Cholesterol Education Program Adult Treatment Panel III (NCEP-ATP III) criteria. [1] It is explicit that there are many MetS definition criteria, notably International Diabetes Federation (IDF), American Association of Clinical Endocrinologists (AACE), World Health Organization (WHO), Revised National Cholesterol Education Program (NCEP-R), and NCEP-ATP III criteria. Importantly, NCEP-ATP III criteria employed by Okpala et al. [1] is currently no more worthy because it was introduced more than a decade ago. [2] Moreover, the evaluation of the aforementioned MetS criteria in Nigeria revealed that the level of agreement among these criteria appeared to be generally poor. [3] As many population-specific MetS criteria have been constructed, [4,5] I assume that the formulation of the national Nigerian MetS criteria could better estimate MetS prevalence and define associated factors in LP patients. Despite the study limitations, LP patients need to undergo regular follow-up for efficient cardiovascular disease prevention.

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