

Biographical Sketch

John Albert Key, 1890–1955

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Abstract This biographical sketch on John Albert Key corresponds to the historic text, *The Classic: Epiphyseal coxa vara or displacement of the capital epiphysis of the femur in adolescence*, available at DOI [10.1007/s11999-013-2913-y](https://doi.org/10.1007/s11999-013-2913-y).

J. Albert Key was born in 1890 and died in 1955 after an illustrious and prolific career (Google Scholar lists 90 citations). Attempts to learn of his early life have been unsuccessful, but he attended the Alabama Polytechnic Institute (renamed Auburn University in 1960), graduating in 1913. He then went to Johns Hopkins Medical School. According to Abbott [1], financial difficulties caused him to drop out a year and teach anatomy at the University of Chicago before returning to Hopkins. In 1917 he volunteered for the Army Medical Corps and was sent to France with the Johns Hopkins Hospital Unit No. 18. Key graduated from Hopkins the following year. He had subsequent surgery training at the Massachusetts General Hospital, then joined the faculty at the University of Maryland before being recruited to the faculty of Washington University in 1926 by Leroy Abbott [5]. In 1930 he succeeded Dr. Abbott as Professor and Chair until his death in 1955.

According to Manske [5], “It was said that mention of his name at an orthopaedic meeting evoked the picture of a short, stocky figure stepping aggressively to the rostrum, his forceful, vibrant voice needing no microphone, with the audience wondering whether he would be serious, knowing

his comments would be good in either case. Generally, his shrewd, wise comments invariably were followed by a humorous sally, which always brought pure delight to the audience. He was the center of attention in any gathering, whether in mixed company or professional groups. His ability to start a conversation and control it was unique.”

One of Key’s major contributions was on slipped capital femoral epiphysis. As with most medical conditions, terminology has changed as new observations altered concepts of the disease and as more or less distinct entities have been distinguished from one another. This month’s symposium is devoted to advances in our understanding and treatment of slipped capital femoral epiphysis (SCFE). In 1926, Key published a comprehensive review of, “Epiphyseal coxa vara or displacement of the capital epiphysis of the femur in adolescence” [2]. At that time, our current term, “slipped capital femoral epiphysis,” had not come into common usage. While Poland [6] had clearly delineated traumatic “epiphyseal separation” from fractures and dislocations, the concept of slippage of essentially nontraumatic origin (or following minor trauma) was only emerging in the early part of the 20th Century. Key comprehensively reviewed the history and terminology of this condition, which primarily was known at that time as “epiphyseal coxa vara.” Key, however, noted at least 12 general causes of an anatomic coxa vara, and suggested the diagnoses must be modified by the etiology. Hence, “epiphyseal coxa vara,” which indicated the deformity was caused by a nontraumatic affection of the epiphysis. As indicated by the title of his paper, displacement of the epiphysis was a key feature. He did refer to the concept of a “slip” and “slipping of the epiphysis,” in several locations, thus setting the stage for our current term. Critically, he recognized the entity was mostly confined to adolescence. Key cited two papers of Frangenheim from 1909 and 1911 based on the examination of six resected

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Fig. 1 John Albert Key is shown. (From <http://www.ortho.wustl.edu/content/About-Us/2483/Our-Alumni/Overview.aspx>, with permission of the Department of Orthopaedic Surgery, Washington University.)

specimens in which he concluded the disease was neither rickets nor juvenile osteoarthritis deformans (a common term used for any number of currently recognized affections in children or adults), but rather a growth disturbance or some form of chondrodystrophy. While recognizing the cause was unknown, Key speculated, “The condition is due to a weakening of the periosteum binding the head to the neck of the femur. The cause of this weakening is unknown,

but it is usually coincident with a period of unusually rapid growth during adolescence.” The pathophysiology and cause of SCFE remain unknown today, although racial or ethnic variations suggest a genetic basis [3, 4, 7]. Key’s contribution was undoubtedly the most clear and comprehensive summary of the world literature at the time, and clearly defined the entity we know as slipped capital femoral epiphysis.

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