Biographical Sketch

Thomas W. Huntington, MD (1849–1929)

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Abstract This biographical sketch on Thomas Huntington corresponds to the historic text, *The Classic: Case of Bone Transference. Use of a Segment of Fibula to Supply a Defect in the Tibia* (1905), available at DOI [10.1007/s11999-012-2496-z](https://doi.org/10.1007/s11999-012-2496-z).

Dr. Thomas Waterman Huntington was born January 16th, 1849, in Rockford, Illinois [9]. He completed his undergraduate education at the University of Vermont in 1871 then obtained a medical degree from Harvard in 1876. He moved west and began a medical practice in Nevada [2]. He married Harriet Olive Pearson of Dixon, California in 1881, and they subsequently had two children. He was in practice for 6 years when he moved to Sacramento, where he had accepted a position as Assistant Surgeon to the Central Pacific Railway Hospital (later the Southern Pacific). Huntington was a forward thinker and performed what was likely the first operation in California for an inflamed appendix about 1890. He was likely one of the earlier surgeons in California to write about infections and appreciate the need for aseptic surgery: at the 1883 meeting of the California Medical Society he presented a paper on “The Methods and Results of Antiseptic Surgery” [3]. In 1899 Huntington was invited to be Chair of the Surgical branch of the Medical Department of the University of California [3], a position he held until his retirement from the university in 1912. Then in 1910, he was appointed as Chief Surgeon of the Western Pacific Railway, a position he held until his death in 1929 [9]. During WWI the Red

Cross sent him on a commission to Italy. At the time of his death at age 80, “Doctor Huntington was in full mental and unusual physical vigor—tall, slender, dignified...” [9].

Huntington was active academically, having published at least 35 articles (an unusual number for the time) between 1894 and 1928. Since he practiced as a general surgeon, these were on a variety of topics, including one on radiation burns. He was active in a number of organizations, becoming president of the California State Medical Association in 1912 [5], and president of the American Surgical Association in 1917 [6]. He was evidently an excellent speaker and was frequently called upon to give addresses. His alma mater, the University of Vermont, bestowed upon him a Doctor of Laws degree in 1913.

The Classic article we republish this month describes a rather astonishing operation, “Case of Bone Transference: Use of a Segment of Fibula to Supply a Defect in the Tibia” [4]. He refers to an earlier paper by Nichols [8], who described minor defects of the tibia where “there was complete reproduction of the bones with the attainment of satisfactory results...” and also two cases with nearly complete loss of the diaphysis. In one of these two patients the diaphysis regenerated within 4 months but with a “conspicuous deformity,” while the second case was considered a “functional failure after the lapse of several years.” Huntington had such a case in a boy of 7 years with acute osteomyelitis. He initially drained the pus, scooped out the diseased cortical bone, leaving the periosteum to reproduce the bone. Six months later, however, there remained a gap of about five inches. Huntington posed a novel and, for the time, undoubtedly radical approach: to osteotomize the fibula and transpose it to the tibia:

“In entering upon this undertaking, I recognized that a central segment of the fibula firmly fixed to the tibia

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Fig. 1 Dr. Thomas W. Huntington is shown here, circa 1912.

at both ends by bony union would carry with it its own nutrient supply, and that this would be largely increased by the more generous nutrition of the host. Assuming this to be true, I reasoned that the bridge of fibula so formed would rapidly expand, and in reasonable time approximate the dimensions of the larger bone, thereby insuring a satisfactory condition as regards weight-bearing.”

He initially osteotomized the fibular proximally and implanted it within the proximal part of the tibial defect. Union “was tolerably slow” but occurred within about 6 months. There was a tendency, however, for the foot to evert, so he performed a second stage in which he transferred the lower end of the fibula to the distal portion of the tibia. That also healed, and at followup Huntington commented, “The lad goes to school, plays ball, and joins in

the ordinary sports of other boys, and despite the lateral deformity and slight shortening, he walks without support and with only the suggestion of a limp.” Huntington’s insight was remarkable, and he clearly had some understanding of the power of bone adaptation (what we now refer to as “Wolff’s Law” [10–12]). More contemporary writers have confirmed the utility of the procedure in osteomyelitis and that the fibula indeed incorporates, remodels, enlarges, and provides excellent function in infections cases where other options are limited [1, 7].

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