



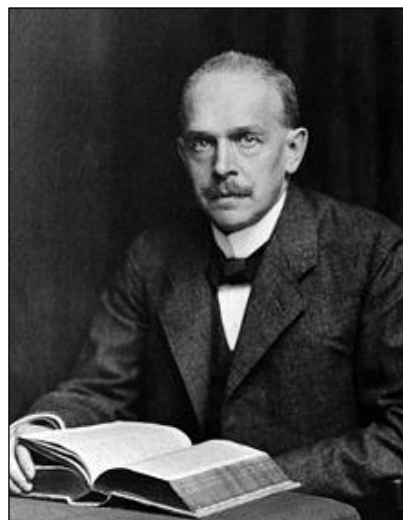
## Dr. Carl Max Wilhelm Wilms (1867-1918)

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The eponym Wilms tumor is well known to pediatric oncologists all over the world and refers to the most common form of renal cancer in the pediatric age group. Its occurrence in adults is rare, but not unheard of. Wilms tumor, also referred to as nephroblastoma, is named after the German surgeon Max Wilms, who was born Nov. 5, 1867 in Hünshoven near Aachen, Germany.

After obtaining his medical degree from the Rheinische Friedrich-Wilhelm Universität Bonn in Germany in 1891, the young Wilms was attracted to surgery. In a move that would raise many eyebrows in today's culture of focusing narrowly and if possible, early on, Wilms deliberately sought to expand his experience before going into surgery. He successfully applied to work as a pathologist for four years under Eugen Bostroem at the Pathologisch-Anatomischen Institut in Giessen. As fate would have it, it was during these years that he saw his first nephroblastoma that would result in his famous 1899 monograph *Die Mischgeschwülste der Niere*.

As has been reported before, Wilms was not the first one to describe what later became known as Wilms tumor. Review of the literature suggests that Thomas F. Rance in 1814 may have been the first to describe this pediatric tumor, although Rance's histologic description is not very specific and could indeed have represented another pediatric tumor of the kidney. Doubt about the diagnosis of Wilms tumor does not exist for Carl Joseph Eberth's 1872 manuscript on a young patient with bilateral renal tumors.



Dr. Carl Max Wilhelm Wilms (1867-1918)

Although Wilms was definitely not the first one to describe the tumor, he provided such a comprehensive review of pediatric renal tumors (adding a few new cases from his own experience) that the disease entity that bears his name became recognized as a separate entity. This eponym exists despite the fact that five years prior to Wilms' manuscript the German pathologist Felix V. Birch-Hirschfeld and his countryman and gynecologist/obstetrician Albert Siegmund Gustav Döderlein reported that they believed that a distinct pediatric renal cancer type had previously been described. They believed the cancer type had been described using a number of different terms, such as mesoblastic sarcoma, embryonal sarcoma, adenosarcoma and nephrogenous dysembryoma.

For a very brief period, what we now refer to as Wilms tumor was known as Birch-Hirschfeld tumor in the German literature. For unknown reasons, Wilms manuscript was noted more broadly in the literature than that of Birch-Hirschfeld and Döderlein and eventually resulted in the eponym that carries his name. Wilms recognized that all tissues seen in nephroblastoma develop from cells of the mesoderm "similar to the growth of an embryo, all these tissues develop from a common and macroscopically undifferentiated germ cell."

After four years in Giessen, Wilms briefly joined the department of internal medicine in Köln as a pathologist before starting his formal surgical training in 1897 with the world renowned Friedrich Adolf Trendelenburg in Leipzig. During his early years as a surgeon, Wilms wrote a textbook entitled *Der Ileus: Pathologie und Klinik des Darmverschlusses*, a book on the surgical aspects of intestinal obstruction. Oddly, until then,

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intestinal obstruction had been viewed as a medical, not surgical, problem. His contribution became a landmark in medical literature and established him as a leading surgeon.

His first position of chief of a surgical service was in Basel, Switzerland. Shortly afterward, in 1910, he was given the opportunity to succeed professor Albert Naraths as chairman of the very prestigious department of surgery in Heidelberg. He accepted and would remain in Heidelberg until his untimely death caused by diphtheria in 1918. While performing emergency surgery on a French P.O.W. who had a swollen larynx associated with diphtheria, Wilms became infected with the disease, and died within a few days at the age of 50. Reportedly, he was successful in saving the life of the French soldier. After his death, his position at Heidelberg was filled by surgeon Eugen Enderlen (1863–1940).

Aside from the manuscript that gave nephroblastoma its currently favored name, Wilms received many honours and contributed to medicine with several innovations. Among his contributions was the design of a tendon suture technique, known in German literature as the “Wilms-Sieverischen” suture. He also developed a spinal cord pressure mercury manometer that was extensively used during World War I and an X-ray exam table that prevented superposition of the spine over the esophagus. In so doing, his table provided a better way to visualize and examine the esophagus.

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