HISTORICAL MILESTONES

Alexander Filipovich Samojloff and Paul Dudley White: Electrocardiography and a Russian-American Friendship

DENNIS M. KRIKLER, MD, FACC
London, England

Sixty years ago Willem Einthoven, who had introduced the string galvanometer for electrocardiography (for which he had been awarded the Nobel Prize in physiology or medicine in 1924), was commemorated in a lecture at the Massachusetts General Hospital. Einthoven had died in 1927, and the speaker honoring him was a Russian physiologist who had recognized the value of his work at the outset and who had himself pursued the subject of electrocardiography vigorously: Alexander Filipovich Samojloff (Fig. 1)(1). Within 5 years of acquiring an electrocardiograph made in Einthoven’s laboratory, Samojloff had assembled enough material to write a modest illustrated book, the first on electrocardiography (2). Unfortunately, that work has not been listed by bibliographers, even though it was written in German, the common scientific language of the day. Samojloff’s publications, however, were widely known in his time, having been cited by, among others, Thomas Lewis (3), and his contribution was still being acknowledged by Burch and DePasquale (4) in their 1964 history of electrocardiography.

More than a scientific colleague of Einthoven, Samojloff became a close personal friend. From 1903 until his death in 1930 Samojloff was professor of physiology in Kazan, a town in Russia east of Moscow, though he also taught electrocardiography in Moscow, and had been appointed to the chair of physiology there just before he died. But family disruption a decade earlier brought him to the United States three times in the 1900s and into the orbit of Paul Dudley White.

During the civil war that followed the October revolution, Samojloff’s twin sons, still schoolboys, were separated from their family when they acted as messengers for a unit of the White (counterrevolutionary) army and had to trek eastward with the Czech legion. Their mother, Anne (Bary) (1876 to 1948), was born in Philadelphia to Latvian parents who subsequently returned to Russia and settled in Moscow, where they prospered (her father’s company built oil tankers, and he was a millionaire in prerevolutionary times).

Thus, when a Red Cross mercy ship evacuated the refugees from Vladivostok, Samojloff’s sons were welcomed to the United States by family and were soon admitted to Cornell University as engineering students.

In the years before the First World War, Samojloff had become friendly with leading American physiologists, including Walter B. Cannon of Harvard and John F. Fulton of Yale. When his sons reached the United States he enlisted the aid of William T. Porter, professor of comparative physiology at Harvard, who arranged for him to visit Boston, where he was reunited with his sons. With the aid of Porter and scholarship funds, both sons transferred to Harvard, where they later graduated from engineering school.

With his sons securely settled, Samojloff returned to Kazan and continued his career. In 1925 his wife and younger daughter, Anna, then aged 9, smuggled themselves across the border to independent Latvia and, after a long wait, obtained American visas. After they had spent nearly a year in Boston, where Anna attended school, Samojloff joined them in mid 1926. And that is where the connection

Figure 1. Alexander Filipovich Samojloff, about 1929 (reprinted with permission from the British Medical Journal) (1).
with White arose. In a letter from White to his mother (Fig. 2) we can see the elements of this story and the fact that Samojloff was known to be a foremost electrocardiographer. The visit to Massachusetts General Hospital on September 7, 1926 was commemorated by a number of photographs (Fig. 3). Samojloff and his wife and daughter returned to the Soviet Union soon thereafter.

When Samojloff returned to Boston for the last time, in September 1929, he spoke on Einthoven at the Massachusetts General Hospital. His address (5) appears in the same volume as the description of a newly recognized syndrome for which White is often recalled (6). Sadly, Samojloff died in 1930 just as he was receiving honor at home; the deteriorating political situation in the Soviet Union, the Second World War and the cold war robbed him of continued recognition in the West. Perhaps we can now modestly rectify this neglect when recalling the link between White and Samojloff, which arose through their mutual interest in electrocardiography.

I am grateful to Oglesby Paul, MD, for the letter from White to his mother (partly reproduced as Figure 2) and for Figure 3, and to Richard J. Wolfe, Curator of Rare Books and Manuscripts, Francis A. Countway Library of Medicine, for permitting their reproduction.

References