MEMORIAL ARTICLE

Involvement of Professor Tadeusz Orłowski in the development of artificial organs in Poland

Maciej Nałęcz

Institute of Biocybernetics and Biomedical Engineering, Polish Academy of Sciences, Warszawa, Poland

The presentation of such an outstanding person as Professor Tadeusz Orłowski and the rendering of his work would not be complete, if we did not emphasize his contribution to the development of biomedical engineering in Poland, and especially to the field of artificial organs.

In the late 1960s, by the stroke of luck, Professor Orłowski turned to me for help while searching for the design solutions for the first Polish artificial kidney. At that time we did not have access to the modern Western technologies or to the foreign currency to purchase them with. Nevertheless, the artificial kidneys which we developed and manufactured, saved or prolonged the lives of hundreds of patients.

It was at that time that the important notion of supporting the internal organ function also with the use of technical methods was brought forward. Needless to say that these methods have been employed until the present day. We consulted all our initiatives with Professor Orłowski.

We began cooperating with the foreign centers, in particular with Professor Nose, the director of the Department of Artificial Organs at the Cleveland Clinic Foundation, who agreed to accept six of my colleagues for a 2-year internship, and with the Swedish Karolinska University (mainly with Professor Jonas Bergström and Professor Bengt Lindholm).

As a result of the 25-year-long cooperation, in 2007 Professor Andrzej Weryński received an honorary doctorate in medical sciences at the Karolinska University.

Professor Orłowski took an active part in establishing biocybernetics and biomedical engineering in Poland. He was a member of the Polish Academy of Sciences committee (Polska Akademia Nauk – PAN) and the Scientific Board of our Institute. He had a broad perspective on medical advances. He would advise us wisely on the paths to choose and teams to form. It was on his own initiative and under his own supervision that the joint laboratory of the Transplantation Institute of the Warsaw Medical University and the Institute of Biocybernetics and Biomedical Engineering at the PAN was established.

In his last years he devoted himself to the study of the hybrid pancreas. He would always say that solving this particular problem concerning millions of diabetic patients would result in awarding the Nobel Prize.

Professor Orłowski was a noble, wise man and content should remain his friends, whom he placed his trust in.

Prof. Maciej Nalęcz, MD, PhD, Institute of Biocybernetics and Biomedical Engineering, Polish Academy of Sciences, Warszawa, Poland Received: February 18, 2009. Accepted: February 18, 2009. Pol Arch Med Wewn. 2009; 119 (5): 292 Translated by Elźbieta Cybulska, MD Copyright by Medycyna Praktyczna, Kraków 2009.