

Transplantation Surgery in Uppsala

Lars Frödin

Transplantation Unit, Department of Urology, University Hospital, Uppsala, Sweden

The first successful kidney transplantation in Uppsala was performed in 1969 by Lars Thorén, professor and the head of the Department of Surgery at the University Hospital. Since then, a stepwise evolution has resulted in a special transplant unit, with a situation in which transplantation has become integrated with other surgical specialities. Apart from having a program for pancreatic transplantation, this unit is about to start transplantation of the liver. Bone marrow transplantation is now feasible in this hospital and a heart transplantation program has been organized.

The progress in organ transplantation has been dominated by developments in cellular biology, immunology, pathology and physiology. Our University has a very good reputation in these fields and the close connection between the institutes dealing with these subjects and the hospital makes it possible to solve current clinical problems by direct contacts with basic science. This adds a dimension of basic scientific solidity to daily clinical problems. The Uppsala model is relatively uncommon and has proved to be of utmost importance for the transplantation activity.

Clinical science in our hospital is based on a network of cooperation. Many basic scientists in the medical field enter the clinics, but their connections with their respective institutes still remain and strengthen the bridge between basic and clinical science.

A number of branches of medicine are in some way involved in experimental and clinical transplantation, for example clinical immunology, nephrology, hepatology, endocrinology, radiology, oncology, pathology, anesthesiology, thoracic surgery, pediatric surgery and clinical infectious diseases. This immense interest has resulted in a broad spectrum of clinical science, which is highly favorable for the evolution of the transplantation unit.

The development of clinical organ transplantation depends not only on science but also on good collaboration between the departments involved. At the same time conformity to the law and consideration of ethics and economic aspects are essential. The follow-up of clinical results in order to achieve optimal clinical progress has led to participation in Scandinavian Multi-Center studies and collaborative transplant studies, and connections with Scandiatransplant, EDTA (European Dialysis and Transplant Association), and a Pancreatic Registry (Minneapolis). In daily practice cooperation with other clinics is actively encouraged in order to find every possible means of improving our clinical results.

The clinical work is concentrated to a ward with 15 beds. Seven specialists and two transplant coordinators are employed. This unit has also achieved cooperation with 22 hospitals in our region (population 1.6 million) for organ harvesting. For many years about 20 organ donors/million have been used for transplantation and these have been shared within Scandiatransplant. This is a very large number compared with other regions in the country and abroad.

In 1987 altogether 85 kidneys and eight pancreases were transplanted. Kidney transplants exceed 50/million, with a one-year graft survival of about 75 % and a mortality rate below 10 %. Experimentally, transplantations of the liver, heart, kidney and gut have been carried out in parallel with the clinical program.

So what was started by Lars Thorén in 1969 has developed into a special unit which is about to end up as a complete transplantation center. The University Hospital will thus have a possibility of transplanting all transplantable organs.

Address for correspondence:

Dr. Lars Frödin
Transplantation Unit
University Hospital
S-751 85 Uppsala,
Sweden