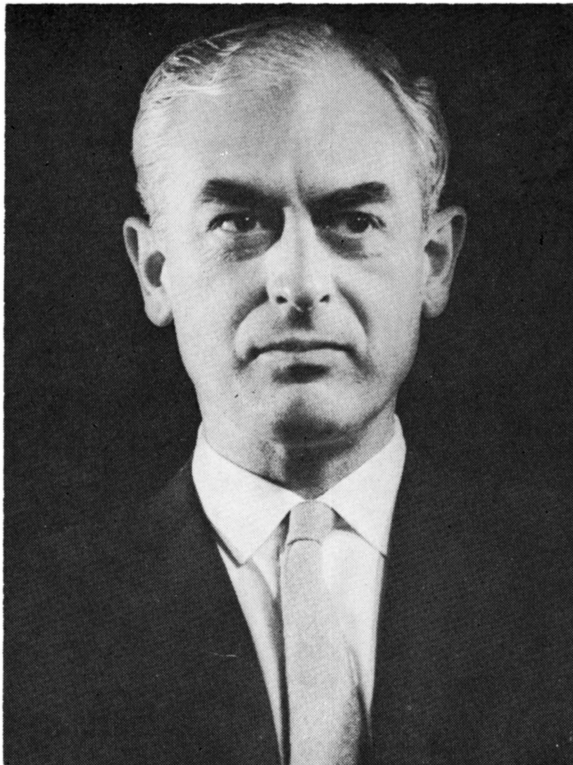


# ORGAN TRANSPLANT

**KEYNOTE ADDRESS**

Reporter - KAREN COLDEN



**Sir Peter Medawar**

Sir Peter Medawar began his Keynote Address by stating that Organ Transplant involved more than actual surgical procedure. It is intrinsically bound to the fields of cancer research, genetics and autoimmunity. He then proceeded to summarize each of the six panels.

The Surgical Aspects of Organ Transplant present three main difficulties, the first being the actual surgery. The second are the physiologically limiting factors. Although these are less important than was first feared, the foremost problem is the slow rate of regeneration of nerves. The third, immunological factors, was defined as anything preventing the acceptance of a homograft where an autograft would succeed. This third factor has prevented the transplant of skin which is immunologically the hardest organ to transplant.

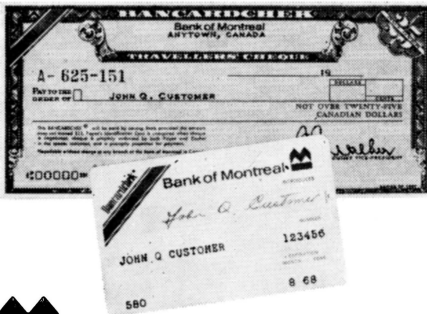
The Ethical and Legal Aspects are concerned largely with the determination of death. It was pointed out that the heart transplant caused an ethical controversy which was unknown with liver transplantation.

When discussing Donor Selection, Sir Peter Medawar pointed out that a homograft will not succeed unless special immunosuppressive measures are taken. However, this task is made easier if the donor and recipient are relatively compatible. Blood relative are the donors of choice. Therefore, the chance

of finding compatibility is statistically greater here. It is noteworthy that progress on donor selection and tissue typing has been the outcome of an international enterprise.

Evolution and Developmental Basis of Immune Reactivity: Incompatibility is the outward sign of genetic difference. Homografts are incompatible in all vertebrates. However, an important question is raised—Is rejection just the sign of the polymorphic nature of humans or is this the sign of a deeper underlying reason that manifests itself as immunity?

Sir Peter Medawar began his discussion of Immune Recognition and Transplant Tolerance, and Mechanisms of Graft Rejection by stating that immunity which is mediated through peripheral lymphocytes may have evolved coequally with humeral antibodies. He went on to say that like enzyme regulated processes, the immune process may be interfered with at many stages. This idea is essential to homograft transplants. Most immunosuppressive agents are byproducts of cancer chemotherapy and being antiproliferative drugs, suppress the humeral antibody response. Sir Peter Medawar ended his address by stating that lately, agents have been discovered which affect lymphocytes but not humeral antibodies, thus making homografts acceptable without concomitant bacterial and viral infections.



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