97th Congress of the German Society for Surgery

President: G. Heberer, München

Poster discussion

Editors:
G. Heberer, G. Feifel, K. Meßmer

Abstracts are listed in alphabetical order
Transplantation of lymphvessels on rats as well as a first therapeutic application on the experimental lymphedema of the dog


Up to now a causal therapy of the lymphedema does not exist. Therefore the microsurgical technique, the longterm permeability and the functioning of homologous grafts of the thoracic duct of the rat were explored.

1. Using a tension free anastomosing technique an acute permeability was stated in all of the 14 end to end anastomoses. Chronically (approx. 70 days) 10 out of 14 proved to be permeable by staining injections, 11 out of 14 by histological examination and all 14 by clinical inspection.

2. After approx. 61 days 6 out of 6 homologous thoracic duct grafts were clinically permeable, 5 histologically and 5 after staining injections.

3. Injections of $^{131}$ showed that the flowrate following thoracic duct transplantations remained unchanged compared to normal animals.

An artificial lymphedema was produced at the hind leg of one dog (Clodius Model 1). Lymphatic vessel grafts were proved to be permeable by lymphangiography. The circumference of the edematous hind leg diminished fast and constantly after the autologous transplantation of femoral lymphatic vessels.
The exact reconstruction of the lymphchannels with lymphatic transplants is a promising possibility for the therapy of the secondary lymphedema.

Chirurgische Klinik, Institut für Chirurgische Forschung, Pathologisches Institut der Universität München
D-8000 München 70/FRG, Marchioninistraße 15.