Letters to the Editor

AUTOTRANSPLANTATION OF LYMPHATIC VESSELS

SIR,—No treatment is available for tackling the underlying cause of secondary lymphoedema due to dissection of the lymphatic pathway at a specific site.¹ A bypass within the lymphatic system seems the most promising way to eliminate the cause for swollen legs in the early stages of the disease, but materials other than lymphatic collectors cannot maintain an adequate lymph flow over a long period. Microsurgical techniques permit transplantation of the lymphatics. In rats and dogs we demonstrated long term function of transplanted lymph vessels, and experimental lymphoedema in dogs was effectively treated in this way.

We have now done a lymphatic autotransplantation in a 38-yearold patient with secondary lymphoedema of the right leg caused by a groin injury. Conservative therapy had not been successful. Superficial lymph collectors 25 cm long from the left thigh were transposed to the right side via the symphysis. End-to-end anastomoses by tension-free anastomosing technique were performed between a deep and a superficial lymph collector of the swollen leg and the transposed collectors. Postoperatively the circumference of the affected leg, which had been 6 cm greater than the right leg, was reduced to only 1 cm bigger within one week. This result has been maintained for 5 months.

Isotopic investigations with technetium-99m tin-albumin ('Tecemin') showed a constant rise of activity beneath the right groin preoperatively and a quick rise and continuous decrease postoperatively during 200 min. After application of tecemin to the right foot, activity was found in the left groin (fourfold greater than baseline activity). This indicates a good function of the transplanted lymph vessels. Microsurgical lymph vessel transplantation seems to be a promising method to treat a secondary lymphoedema.

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