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LYMPHOGRAPHIA

ISOTOPIC LYMPHANGIOGRAPHY TO EVALUATE LYMPHEDEMA BEFORE AND AFTER OPERATIVE TREATMENT

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Fig. 1 (See facing page): Isotopic lymphography using 4-8mc of 99mTc rhenium sulfide before (left) and after (right) lymph nodal-venous shunt in a 21-year-old female with left leg congenital lymphedema. Note absence of iliac lymph nodes with severe stasis of lymph in the thigh and lower leg (left). Six months after lymph nodal-venous shunt in the groin, isotopic lymphography revealed near normal and symmetrical lymphatic drainage of both lower extremities (right) which correlated with an improved clinical picture.

COMMENT

Since the first description by Kinmonth (1) lymphangiography has been the mainstay for evaluating structure and function of the lymphatic system (2). On the other hand, radiocolloids have been used in the past primarily to detect lymph nodal involvement by neoplastic disease (3). Lymphography, using oily radiopaque lipiodol, however, for evaluating lymphedema has certain drawbacks among them considerable technical difficulties and both local and systemic complications (3). Radionuclide lymphangiography in contrast is easy to perform, is virtually free of side effects, and has been particularly useful for evaluating peripheral edema particularly before and after operation. Specifically, lymphography with radiocolloid is not associated with chemical lymphangitis, damage to lymphatic endothelium, allergic reaction, exacerbation of lymphedema, or retention in nodes, side effects commonly associated with contrast lymphography (3). Moreover, edema does not technically complicate its use because radiocolloid is injected intradermally without patient discomfort. Finally, radiocolloid lymphography is easy to use in children for evaluating hereditary lymphedema and can be repeated as often as necessary without damage to the lymphatic system.

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Fig. 1.