

ABNORMAL RADIONUCLIDE ANGIOGRAM IN CERVICAL LYMPHADENITIS: CASE REPORT

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We have observed increased activity over the neck on radionuclide angiograms of two patients with cervical lymphadenitis. This incidental finding should not be confused with other causes of locally increased perfusion.

Cervical lymphadenitis may evoke increased perfusion by branches of the ipsilateral subclavian artery through its thyrocervical and costocervical trunk branches, the vertebral artery through its muscular branches, and the external carotid arteries. This phenomenon was detected as an incidental finding in two patients.

MATERIALS AND METHODS

Case 1. A 26-year-old woman was referred for a brain scan for evaluation of headaches. Following oral perchlorate and the intravenous injection of a bolus of 25 mCi of ^{99m}Tc -pertechnetate, an anterior cerebral angioscintigram was run through arterial and venous phases using 4-sec images. The Anger camera was equipped with a parallel-hole collimator. It showed a localized area of intensely increased activity over the neck in the region of the left carotid artery (Fig. 1). Hemispheric perfusion was symmetric. Five delayed scan images of the brain were normal.

Examination revealed tender enlarged superficial left-cervical lymph nodes corresponding in location to the flow-study abnormality. The patient had infected dental caries on the left side, and this was presumed to be the cause of her lymphadenitis.

Case 2. A 27-year-old woman was referred for a thyroid scan for evaluation of possible thyroiditis. Following the intravenous bolus injection of 3 mCi of ^{99m}Tc -pertechnetate, anterior angiographic images were obtained using a parallel-hole collimator. They showed increased activity over the right carotid artery (Fig. 2). A thyroid image was normal.

Examination of the patient revealed tender enlarged deep right-cervical lymph nodes lateral to the carotid artery corresponding in location to the flow-study abnormality. The nodes resolved spontaneously in 10 days and the adenitis was presumed due to viral infection.

DISCUSSION

Increased activity over the carotid region on a radionuclide angiogram should suggest the possibility of lymphadenitis. This finding could be mistaken for an ipsilateral vascular lesion or a contralateral carotid stenosis.

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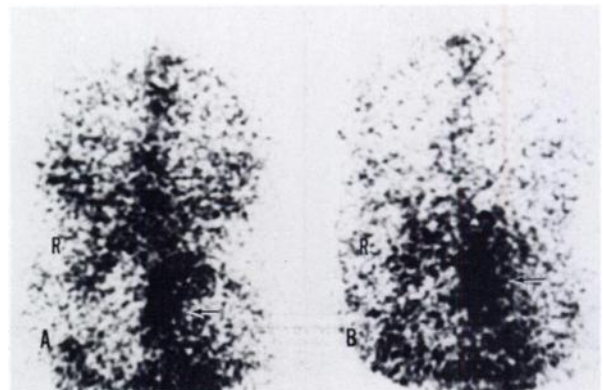


FIG. 1. Radionuclide cerebral angiogram shows area of increased activity (arrow) in left carotid region in both arterial (A) and venous (B) phases.

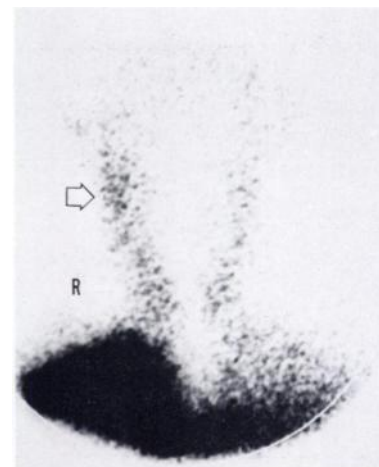


FIG. 2. Radionuclide angiogram of neck shows increased activity (arrow) in right carotid region.