# M. Brain and Nervous System

## The Double Trace Method and Converging System of the Brain Scintigraphy for Deep Midline Brain Tumors

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It has been noted that the diagnostic valve of the convetional scintigraphy is very much limited for such intracranial lesions as deep midline tumors. The purpose of this study is to incrase the scintigraphical acuracy with the double trace method and converging system.

Sixteen cases, including three subfrontal tumors, six pituitary tumors, six posterior fossa tumors and one temporal infarction, were investigated, and the scintigraphical images obtained with these method are compared with the images of the conventional scintigraphy. Characteristic findings of the abnormal pituitary region and posterior fossa were visualized, and our new techniques were cosidered to be more confirmatory than the conventional scintigraphy.

## Brain Scintigram of Basal Medline Lesions ——Significance of Digital Processing in Clinical Diagnosis

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Brain scintigrams with 8—10 mci of pertechnetate were studied refering to surgical, histological and other neuro-radiological findings for 91 cases with diagnosis or suspect of basal midline lesions. Anterior view of 45 cases were stored in magnetic tape, displayed on CRT of data processing system and studied the ratio of average count for regions of interest, 2cm×2cm in size, placed on areas of lesion, sagittal sinus and normal brain hemispheres.

In 18 pituitary adenomas, excluding acromegaly and other intrasellar cases, 89% of cases with surgical indication for optic nerve symptoms were reported as abnormal scintigrams. In 20 craniopharyngiomas, 11 positive cases consisted mainly of solid, recurred or thick cystic tumors. Five of 6 ectopic pinealoma and all 6 parasellar or medial sphenoidal ridge meningiomas showed positive uptake.