Brain Scanning with Meningioma

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57 Brain Scans and operations from 38 patients with histologically meningiomas were evaluated. 52 of the 57 brain scans were positive (91.0%) and had a well-circumscribed, peripherally located area of activity on the static image to be highly specific for meningioma. But we had 5 negative scans in the basilar and infratentorial regions (2 were in the tuberculum sellae, 1; clivus, 1; sphenoidal ridge, 1; preitorcular region).

They were all small. Of the 46 contrast angiography, 34 cases had tumor stains. RI angiography were performed : meningiomas. In 6 cases, the lesion showed a gradual accumulation of activity commencing in the late arterial and early capillary phases and persisting through the venous washout. Histologically 4 was meningothelial, 1; hemangioblastic, 1; fibroblastic meningiomas. They have all tumor stains except one posterior convexity meningioma. But in the 1 hemangioblastic meningioma, the lesion showed immediate good visualization followed by rapid decline of radioactivity. The contrast angiography showed the same pattern. In 2 cases, the dynamic study showed delayed visualization, followed by a gradual increase in radioactivity. Histologically 1 was fibroblastic meningioma which had no tumor stain, but 1 was meningothelial one which had tumor stain.

We have found RI angiography of the meningioma showed various patterns. And there is no apparent correlation between the positive static scans and the histological types, the presence of the tumor stains.

Alterations of Abnormal Activity on the Brain Scintigram with Tc-99m-pertechnetate after Glucocorticoid Administration. Clinical and Experimental Studies

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There are some occasions to perform several brain scintigraphies repeatedly in the same patient with brain tumor for examining his clinical course. At that time, we often experience those cases in which scintigrams showed decreased abnormal activity following glucocorticoid administration. The present study describes how much the brain edema is concerned in the appearance of abnormal