

NEUROLOGICAL PICTURE.....

Multiple cavernous haemangioma showing marked calcification on cranial radiography

We report a case of multiple cavernous haemangioma with marked calcification seen on cranial radiography. A 40 year old man with no history of neurological illness experienced a generalised seizure. He showed no signs of inflammation or abnormalities in calcium metabolism. Cranial radiography showed multiple round cotton wool-like lesions (fig 1 A). Cranial CT showed that these calcified lesions were located in the subcortical areas of the brain (fig 1 B) and MRI showed that they consisted of a mixture of low, iso, and high signal intensity (fig 1 C).

Although brain tumour, nodular sclerolosis, endocrine disorders (especially hyperparathyroidism and/or hypoparathyroidism), and parasite infection produce calcifications in the brain, the calcified lesions seen in our patient were thought to be cavernous haemangioma on the basis of their characteristic appearances on brain MRI. Cavernous haemangioma is a vascular malformation characterised by histological findings of blood cavities surrounded by a single layer of endothelium without muscular tissue or intervening brain paren-

chyma. These lesions might occur in the subcortex, thalamus, basal ganglia, and brain stem.¹ Our patient may have had the hereditary type of this disease because the tendency to form multiple lesions is seen in the hereditary rather than the sporadic type (73% v 20%),² but he had no family history.

Brain MRI is the most effective for diagnosis of cavernous haemangioma. Typical patterns of the lesion on T1 weighted MRI images seem to be a heterogeneously high signal intensity central reticulated core and a peripheral low signal intensity rim.³ It is known that calcification is sometimes seen in cavernous haemangioma, but conventional radiographs rarely show calcification.⁴ This case is thus noteworthy because it showed marked calcifications that could be identified on cranial radiography. Although surgical resection is the first choice for treatment, phenytoin was effective for our patient.

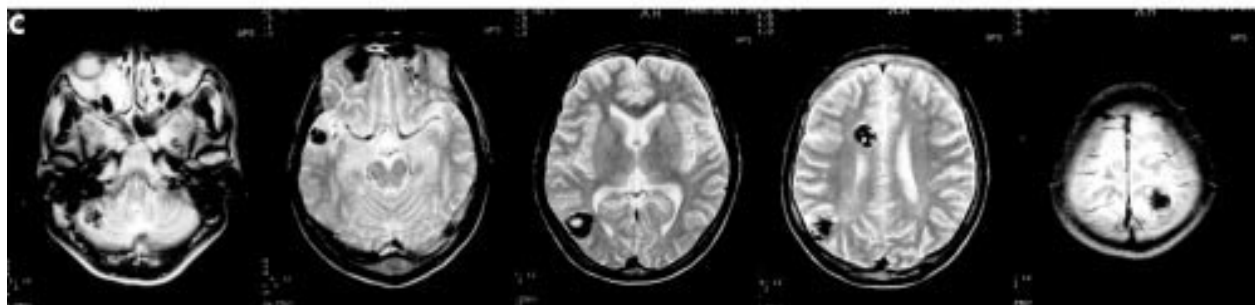
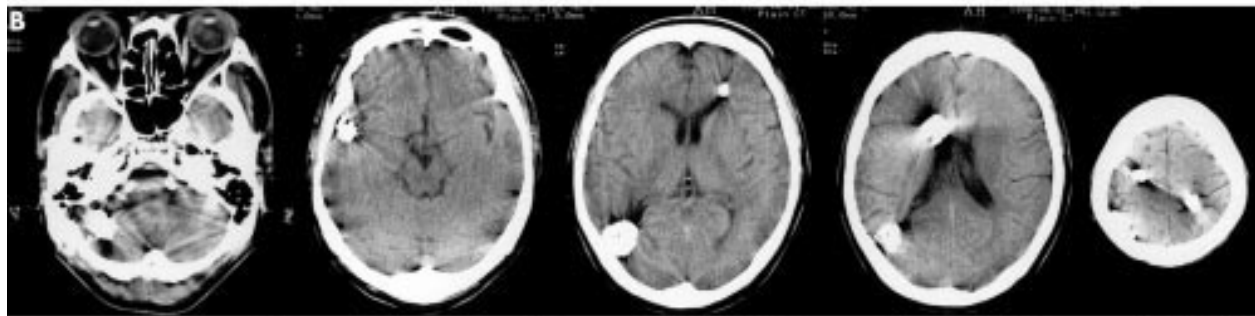
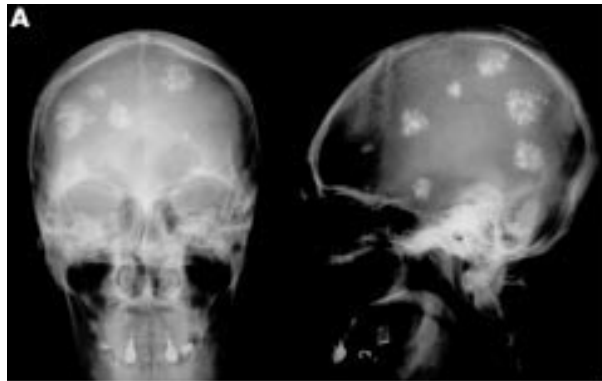
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Cranial CT and MRI of patient with haemangioma.