The Significance for Diagnosis and for Surgical Technique of Multiple Aneurysms of the Same Internal Carotid Artery

By

A. Jefferson

With 11 Figures

Summary

A small series of five patients with more than one aneurysm on the same internal carotid artery is reported. The author believes that similar cases must have been observed by many neurosurgeons but can find no specific reference to the technical and diagnostic problems created by such lesions.

Sometimes these lesions can be clipped separately, but when the aneurysms are contiguous it may be helpful to apply a clip with its jaws parallel to the long axis of the internal carotid artery.

The author suggests that more case reports would help to advertise the relative frequency of such lesions and thereby should improve their management.

As far as the present writer is aware there have been no reports which have focussed specifically on those aneurysms which are multiple and are disposed along the length of one internal carotid artery. This paper presents the author's experience with 5 such patients. The radiological recognition of such lesions can be difficult but the correct surgical treatment may depend upon a pre-operative suspicion that the abnormality seen represents more than a single aneurysm.

Case Reports

Case 1. Female. Aged 46. She sustained a subarachnoid haemorrhage on 15. 9. 1974; lumbar puncture confirmed the diagnosis. Angiography had been performed in her referring hospital. By the time she was transferred to the Neurosurgical Unit on 30. 9. 1974 she had developed a partial right IIIrd nerve palsy. The angiograms had shown what was, at the time, regarded as a loculated aneurysm on the posterior aspect of the right internal carotid artery lying in the region of the posterior communicating
Fig. 1. Case 1. Female, aged 46. (In this and in all the subsequent comparable figures a) reproduces the A-P or the oblique projection, and b) reproduces the lateral projection.) In a) the radiograph is of poor quality and no detail can be seen. In b) the lesion was originally interpreted as a multiloculated single aneurysm; at operation it was found to consist of two adjacent aneurysms (see text)