

SUMMARY

The aim of this work was to outline the role of carotid angiography in the diagnosis of Frontal Region Tumors.

This study was performed on 10 cases with provisional diagnosis of a frontal lobe space occupying lesion. Carotid angiography was performed to all cases by direct puncture technique. Most examinations were common carotid angiography and included at least five films three in lateral projection and two in the frontal projection. Carotid angiogram was obtained representing the arterial, capillary, and venous phases.

Analysis of the carotid angiograms was done as regards the displacement of cerebral vessels from their normal course, and the tumor circulation. We could recognise different types of vascular displacements characteristic to masses at different regions of the frontal lobe which can be divided into : Pre-Sylvian (anterior to the coronal suture) with further six subdivisions, and Supra-Sylvian (posterior to the coronal suture) with further three subdivisions.

Analysis of the carotid angiograms as regards Tumor Circulation including the changes in the degree of vascularisation, presence of abnormal vessels, and the circulation time, in many cases can be pathognomonic.

We could determine the site of the frontal tumors in all cases by their characteristic displacement except in one Supra-Sylvian Parasagittal mass. The pathologic nature could be reached in four cases (out of 10). Three of them was meningiomas and the fourth was glioma.

The results was discussed and we concluded that carotid angiography is of high diagnostic value in determination of the site and vasculature of a frontal region tumor and sometimes the nature of the tumor in those lesions that has a characteristic vasculature. Its role is limited in determination of the size of a frontal mass and in detection and localisation of multiple lesions.