INTRODUCTION

Transient ischaemic attacks (TIAs) are temporary focal cerebral or retinal deficits that resolve within 24 hours. **(Hennessy et al.,2000).**

The appearance of transient ischaemic attacks (TIA) is an important sign of vascular risk. The maximum time the deficit lasts has been set arbitrarily at 24 hours. TIA shares the same risk factors and aetiopathogenic mechanisms as ischemic stroke and should, therefore, be considered as such. TIA maintains a practical interest since it provides a simple method of identifying patients with a high vascular risk. **(Garcia et al., 2002).**

Four-fifths of the ischemic insults are due to atherosclerosis. The great majority of these lesions involve the extracranial cerebral arteries and they are especially prevalent at the carotid bifurcation, which make the surgical treatment of atherosclerotic lesion feasible. **(Norris et al., 1991).**

Imaging of the cerebral circulation in the context of cerebral ischaemia requires an understanding of the type of pathology that may be encountered, and the information that the neurologist or vascular surgeon may demand. **(Lancet, 1991).**

There is an increasing trend to rely on duplex ultrasound rather than angiography to measure an internal carotid artery stenosis. **(New G et al., 2001).**

Duplex sonography is an effective tool for evaluating internal carotid artery (ICA) stenosis, and power Doppler imaging has improved its value in this regard. **(Koga et al., 2001).**

Non-invasive duplex scanning is an ideal technique for determining which patients should proceed with invasive arteriography and carotid endarterectomy. **(Pohl, 1994).**

Color Doppler ultrasonography was established in recent last years as an essential diagnostic imaging method for screening of patient with cerebrovascular disease, depicting not only the degree of carotid stenosis but also providing information on the atherosclerotic plaque morphology and consistency **(Gomez, 1990).**

Doppler imaging techniques allow safe, inexpensive, noninvasive studies that are reproducible and reliable. The techniques are easily adaptable to office and hospital practice and have the distinct advantage of saving some patients from angiographic investigation. **(Otis, et al 1987).**

The higher the degree of carotid stenosis, the more likely it is to be associated with ultrasonic heterogeneous plaque and cerebrovascular symptoms. Heterogeneity of the plaque was more positively correlated with symptoms than with any degree of stenosis. **(AbuRahma et al., 2002).**