

Microsurgical anatomy of the external carotid artery: stereoscopic study

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Anatomy is a fundamental science for each and every medical specialty. Its apparent stagnation is associated with little awareness of its importance by the medical community. It is a dynamic science that develops along with medicine and surgery, and requires constant update of anatomical concepts and values neglected in the past by medical practitioners.

Stereoscopy, in use since the sixth decade of the last century, remains as a useful tool for teaching and training on anatomy. It is widely used in surgical operations, especially those requiring microscopy¹.

In this context, the external carotid artery is one of the most important structures in the neck, because of its multiple branches and role in the functional approach to many structures of the neck and face. Despite the classical reports on the multiple communications between the external and the internal carotid systems, the article published in the current issue of *J Vasc Bras* describes the path of all its branches and most relevant anastomosis¹.

Clinical and surgical use of this knowledge is not restricted to neurosurgery. Specialization imposes upon us the need of knowledge in depth of all aspects of fundamental medical knowledge related to the actual practice of a specialty. Angiology and Vascular Surgery are included in this context, especially the constant study of the human anatomy.

Currently, minimally invasive procedures are fashionable in most specialties. Angiology, Vascular Surgery and Radiology are included in these current trends.

Levels of evidence developed in international consensus, such as the North American Symptomatic Carotid Endarterectomy Trial (NASCET)², are widely used

worldwide. They confirm the current concepts of the Guideline on the Management on the of Patients With Extracranial Carotid and Vertebral Artery Disease³ from 2011, where it is possible to find guidelines for the use of carotid stents, besides a comparative analysis of outcomes in patients treated with stent placement and those treated by endarterectomy³.

Therefore, the study of carotid artery anatomy is especially important, especially for the performance of carotid endarterectomy, which makes the article by Isolan et al. significant from the point of view of clinical-surgical applicability¹.

Among the applications in the field of Angiology and Vascular Surgery, it should be emphasized the selection criteria for symptomatic patients, based on the NASCET cooperative study².

According to this trial, patients neurologically stable with carotid stenosis of 70% or more benefited from surgery in services where the morbi-mortality rate was less than 6%. There is strong evidence that the degree of stenosis is directly proportional to the benefit of intervention^{2,3}.

The statement that stereoscopic images give an idea of depth, which is not achievable with conventional bidimensional images, is quite relevant in the discussion of this subject¹.

Tridimensional perception has substantially increased in the medical literature, as well as in the media in general, and it is also well addressed in the article¹.

It is expected that in the near future there will be better conditions for the understanding of tridimensional techniques and the use of stereoscopic images. There are also prospects for its use to increase specific abilities of medical

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specialists, especially those related to surgical planning and training by telesurgery.

Finally, we state at this editorial to be in consonance with the words of the editor-in-chief of J Vasc Bras, Dr. Yoshida⁴. He has always been in the forefront, encouraging the submission of articles that bring forward current data and provide an up-to-date understanding for the whole community of specialists, graduate students, and residents of Angiology and Vascular Surgery. After all, the advance of human knowledge is not necessarily result of new discoveries, but many times, of a new look on what is already well-known.

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