The problem of dizziness is both common and complex; its significance is determined by the underlying cause. Cerebral vascular insufficiency is defined as the acute or chronic reduction of blood flow to the brain resulting in the compromise of function, or of structure, or of growth and development.

The System Approach is based on the analysis of the SYSTEM and its component parts: the heart, the arteries to the brain, and the brain, with the blood as the common denominator.

The indications for investigation include disability for ordinary activity, failure of conventional therapy, demonstrated pathology, and suspicion of serious underlying disease.

Vertebral artery surgery has progressed to include proximal as well as distal reconstruction with the carotid distal vertebral artery bypass, but diagnosis, indication and case selection must be precise.

The non-invasive Cerebral Hemodynamic Evaluation characterizes the cerebral vascular system, the extracerebral blood flow and response to normal stress.

The CT scan identifies structural abnormalities of the brain and provides valuable blood flow data, especially in the posterior fossa. The angiogram delineates merely the arterial anatomy.

Specific functional studies may be hemodynamic dependent.
but indications for vertebral artery surgery on the basis on such studies is not practical at this time.

Surgical therapy of the underlying pathology may be directed to the heart, the carotid and vertebral arteries or to the brain. Specific surgical reconstruction is dictated by analysis of the system and the specific anatomic and physiologic requirements of the case.