

Abstract

MULTIFUNCTIONAL MEASURING DEVICE WHICH MAY DETERMINE CAROTID
ARTERY BLOOD PRESSURE

The present invention provides a multifunctional measuring device capable of determining carotid blood pressure, comprising: a heartbeat sensing unit to be disposed on a subject's chest in order to obtain heartbeat signals; a pulse sensing unit to be disposed on the subject's neck at a position corresponding to the subject's carotid arteries in order to obtain pulse signals; and a data calculation unit configured to communicate with the heartbeat sensing unit and the pulse sensing unit and to process signals coming from the heartbeat sensing unit and from the pulse sensing unit; wherein the data calculation unit obtains a mean arterial pressure of the subject's carotid arteries by calculating with the heartbeat signals coming from the heartbeat sensing unit and the pulse signals coming from the pulse sensing unit. The invention can be used to detect carotid blood pressure and pulse wave velocity, and the measurement results can be used to assess carotid stenosis and cerebral blood volume, so as to quickly screen the degree of carotid stenosis for those who have a high risk of cardiovascular disease, and respond to a high demand in the global medical device market.

(FIG. 1)