Abstract

It is important to determine the cardiac risk of a patient in advance to prevent premature death. This paper gives a brief of the methods used so far to determine the cardiac risk of a patient from a PPG signal. It also compares the effectiveness of each article in various criteria including cost and the paper also presents a novel technique to determine the cardiac risk of a patient at reduced cost. The paper states to find the cardiac risk of a patient form a Photoplethysmographic Signal. Arterial stiffness leads to cardiac disorders, the degree of arterial stiffness can be obtained by calculating the augmentation index of a pulse wave. Augmentation Index is an important factor of cardio vascular risk. Augmentation Index is the measure of Arterial stiffness derived from the ascending aortic waveform. Thus by calculating the augmentation index the degree of arterial stiffness can be calculated by which cardiac risk to the patient can be diagnosed. The augmentation index is determined by implementing an algorithm.

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An Early Prediction of Cardiac Risk using Augmentation Index Developed based on a Comparative Study

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- Michael F. O’rourke, M. D., D. Sc., Andwilmer W. Nichols, Ph. D. *
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