

The Possibilities of Heart Force Markers and Interval Identification

It is hoped that the new method and practice for the identification of Heart-force markers and intervals (Patent Pending 62928212) has many applications for the continuing understanding of the human physiology. Having a complete understanding of the beating heart and the functionality derived thereof should prove to be an amazing and simplistic tool for the medical industry.

“Diastolic Dysfunction” the aging of the heart:

The ability for doctors to evaluate the health of the heart-mass in relationship to an existing patient’s trends and the population at large over said patient’s lifetime can be an excellent health appraisal tool. Intricate needed structural evaluation tools of dynamic mass, stiffness and compliance are possible by algorithmic extraction from one simple set of intervals from the data made possible with this method.

Ejection Fraction:

One of the more interesting aspects of the human heart, is that of its functionality as a pump. It pumps the life providing blood to the human body. Health professionals like to evaluate the efficiency of the heart to actually pump the blood, answering the question as to how efficient the heart as a pump actually is. Ejection is not a volumetric quantity. It is a metric of force; answering the question about how quickly and how efficiently something is moved from one location to another. For a good deal of time Ejection Fraction has been measured as a ratio between the size of an engorged heart chamber, to that of a fully condensed chamber due to muscle contraction ability. Wouldn’t it be much better to put a metric in place that is actually derived from the force that actually ejects the blood from the chamber out into the body (or lungs) – perhaps both.

Single Event Analysis (PVC events used as an example)

Occasionally the extreme repetitiveness of the human heart-beat is interrupted with instantaneous events. Sometimes these events are of no consequence, but sudden changes in patterns and repetition of the abnormal events in a pattern have meaningful impacts on the quality of life, and should be examined. The more detailed the placement of typical trend demarcation (markers) and identification of intervals within the span of the average heart-beat, aids in the understanding, and guidance for corrective treatment.

OTHER POTENTIAL APPLICATIONS WILL BE LISTED FOLLOWING EVALUATION. MORE DETAILED INFORMATION ABOUT THE ACTUAL COMPUTATIONS AVAILABLE SEPARATELY.