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سجی

cardiovascular instrumentation

the increments and devices have been responsible for a dramatic increase in the percentage of heart attack patients who recover to lead normal or near-normal lives as follow

the instruments used in cardiovascular are

1. Diagnosis devices
 - a. Electrocardiogram (ECG) with electrodes to obtaining an accurate ECG involves the metal electrodes ... ion flow must be converted to electron flow through a chemical reaction and makes the ECG signal larger than normal for such reaction .
 - b. Amplifiers .
the design of the amplifier used to record ECG signals is important the amplified of the typical ECG signal (is only about 1 mv).
 - c. Heart rate-meter
To record the change in radioactivity with time that signal from each detector .
 - d. oscilloscope
ECG is continuously displayed on an oscilloscope for detecting life-threatening rhythm disturbances .

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2. Therapic device

a. Heart fibrillation:

a disease of irregular and inefficient rapid contraction of heart muscle . use defibrillators device ... that heart pumping action

b. Defibrillators,

Are devices that make the contraction of heart muscle more regular and effectional , which initiate the heart normal rhythm .

c. Pacemaker

To improve the quality of life for patients with faulty atrioventricular (AV) nods. The pacemaker contains a pulse generator that puts out 72 puls/min , and put in place just below the right collarbone is lifted this will sustain life of patient .

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