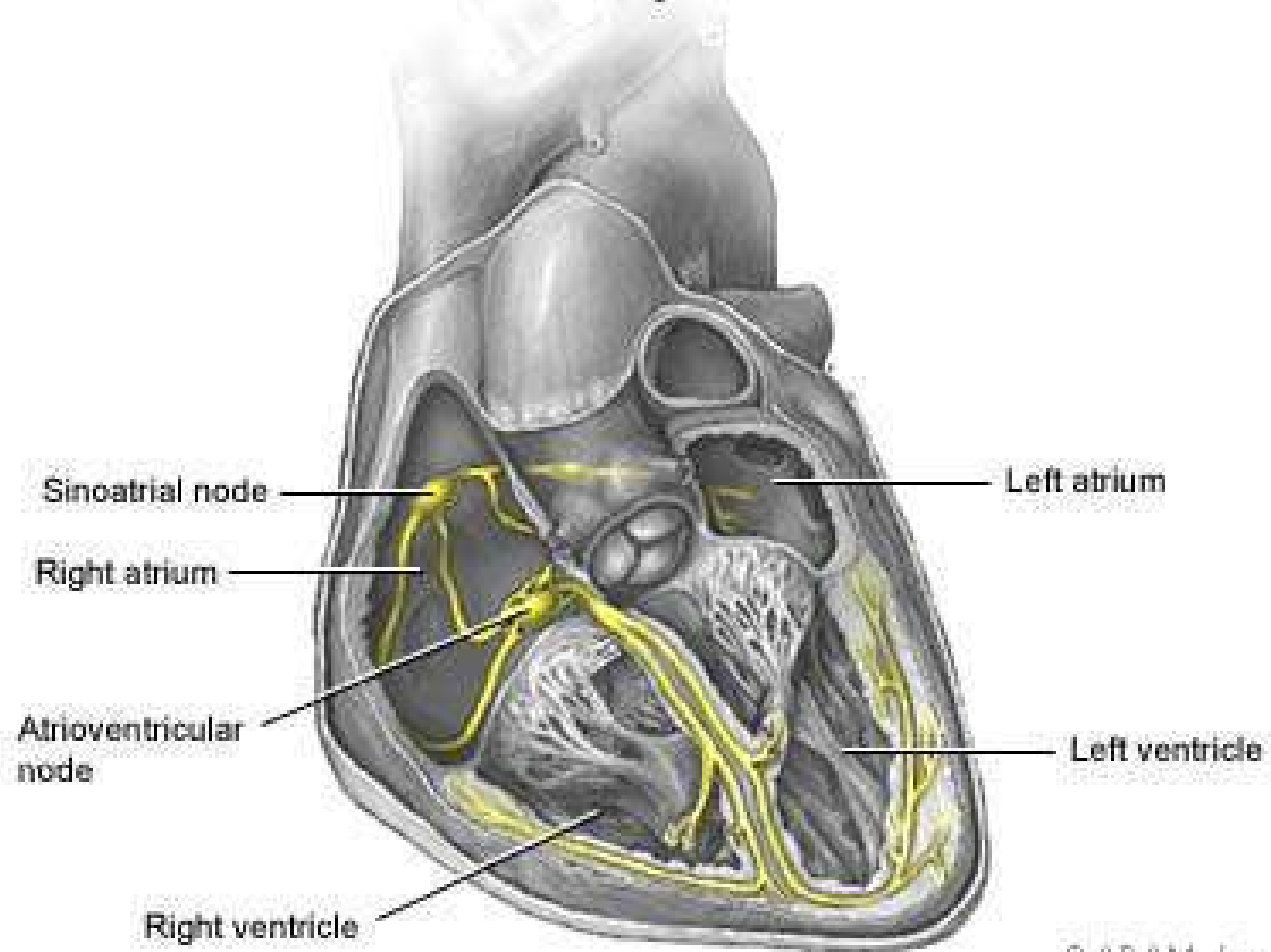


Electrical Conduction of the Heart

Intrinsic conduction system of the heart



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The Sinoatrial Node : SA Node

- Establishes the basic rhythm of the heartbeat, also called the natural pacemaker of the heart
- Located in the posterior wall of the Right Atrium
- Electrical impulses from the SA node start each wave of muscle contraction in the heart

The Atrioventricular Node: AV Node

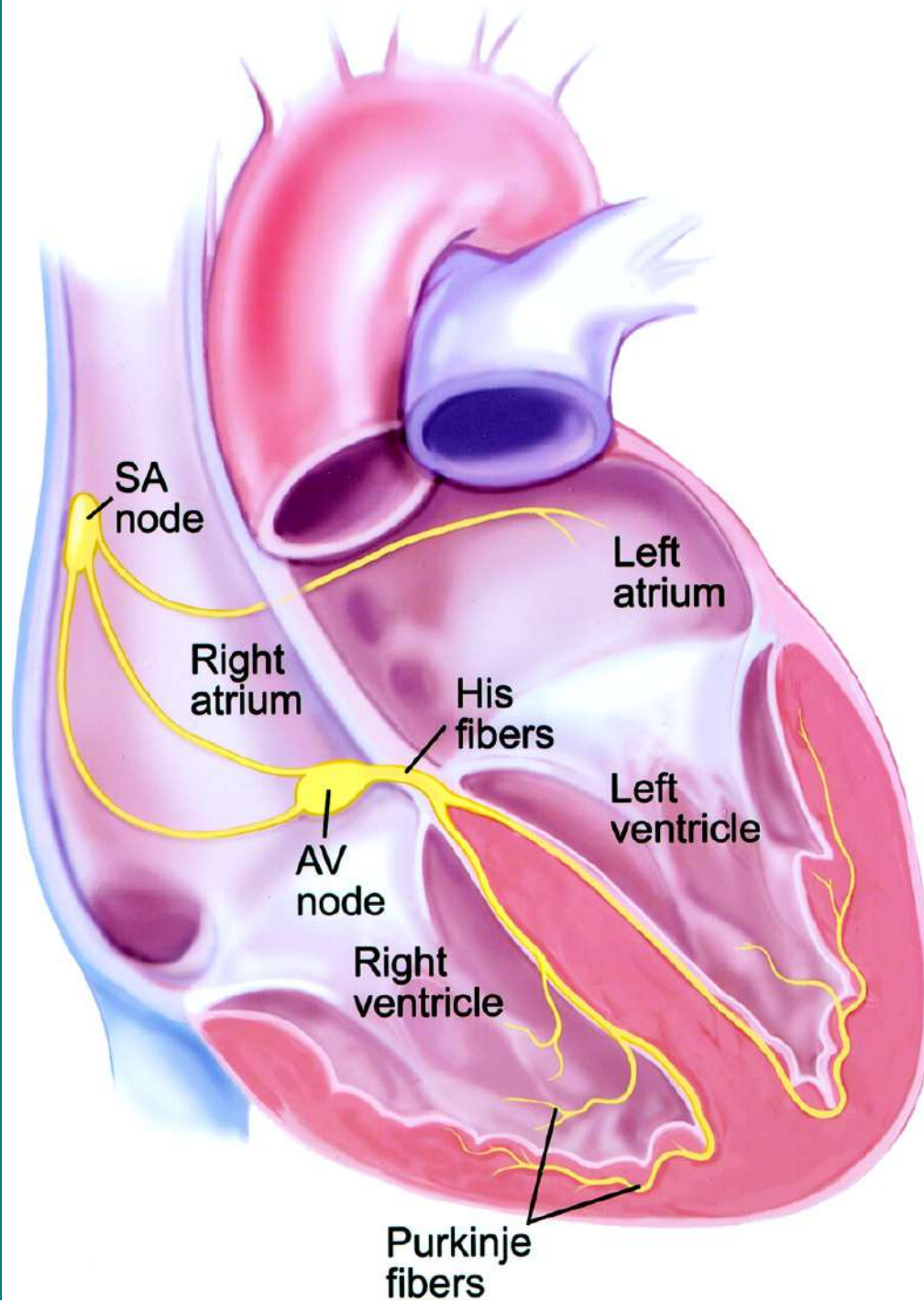
- Impulses from the SA node travel to the AV node
- Located on the floor of the Right Atrium near the interatrial septum
- Once the electrical impulse goes through the AV node it then travels to the Bundle of His

Bundle of His

- The bundle of His, named after Wilhelm His Jr. (19th century Swiss MD)
- Located within the interventricular septum
- Branches of the Bundle of carry impulses to the Right and Left Ventricles and to the Purkinje fibers.

Purkinje Fibers

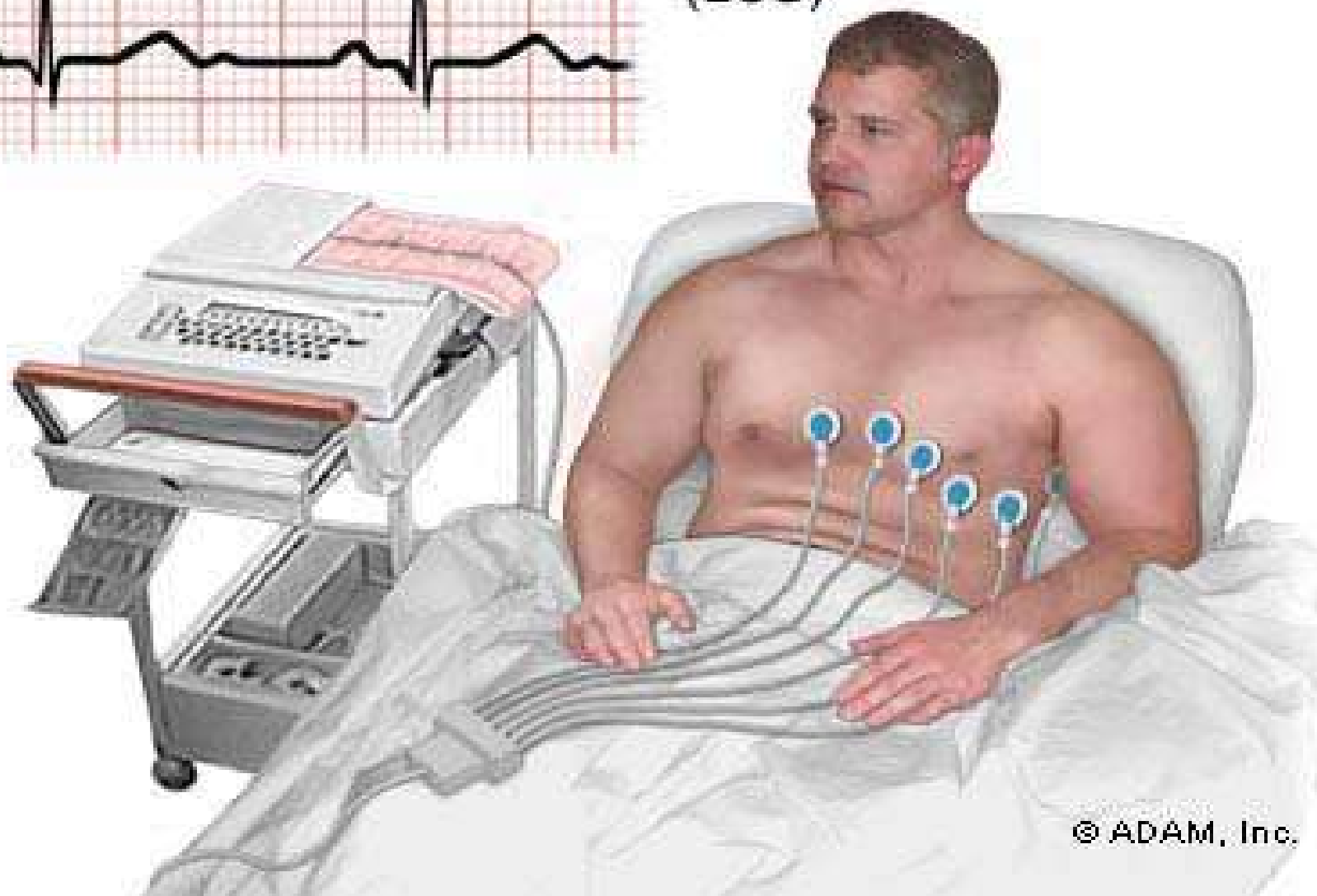
- Purkinje fibers named after Johannes Purkinje a 19th century physiologist
- Causes the ventricles to contract simultaneously forcing blood into the aorta and pulmonary arteries.



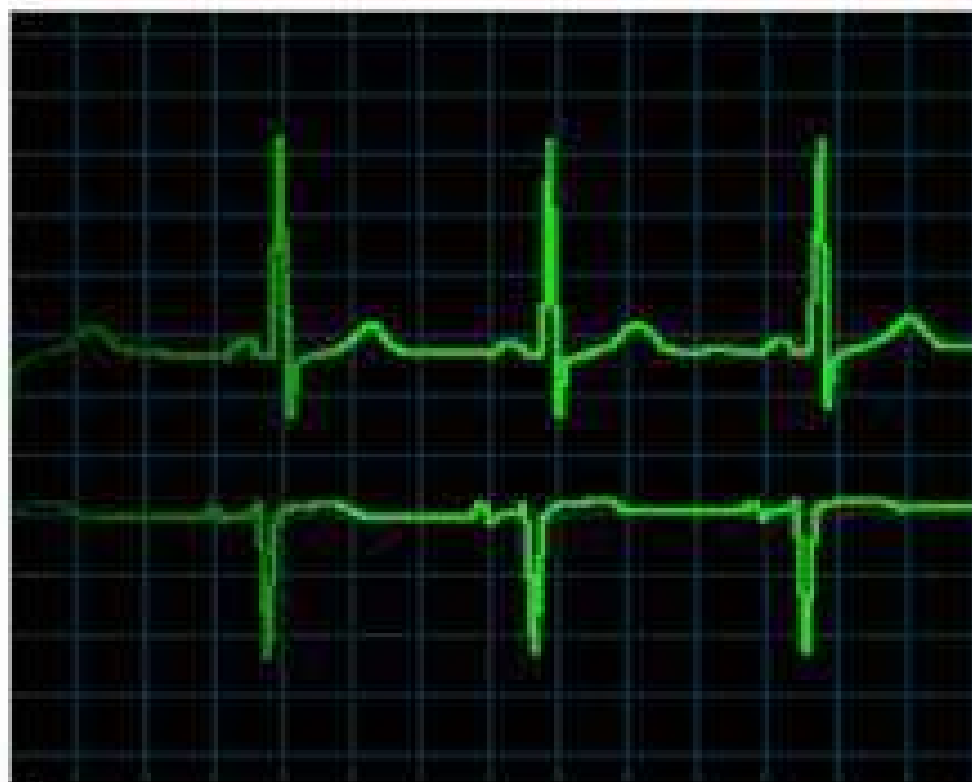
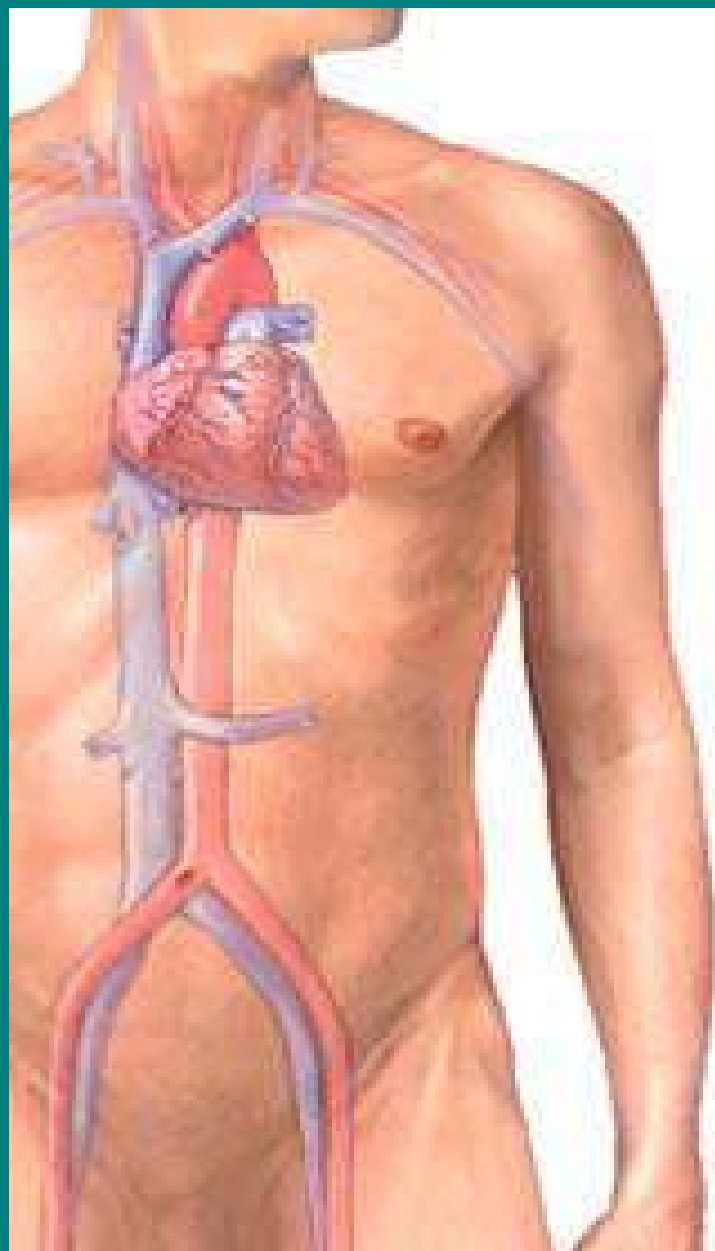
[https://www.youtube.com/
watch?v=fZT9vIbL2uA](https://www.youtube.com/watch?v=fZT9vIbL2uA)



Electrocardiogram
(ECG)



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Normal heart rhythm

Sinus bradycardia

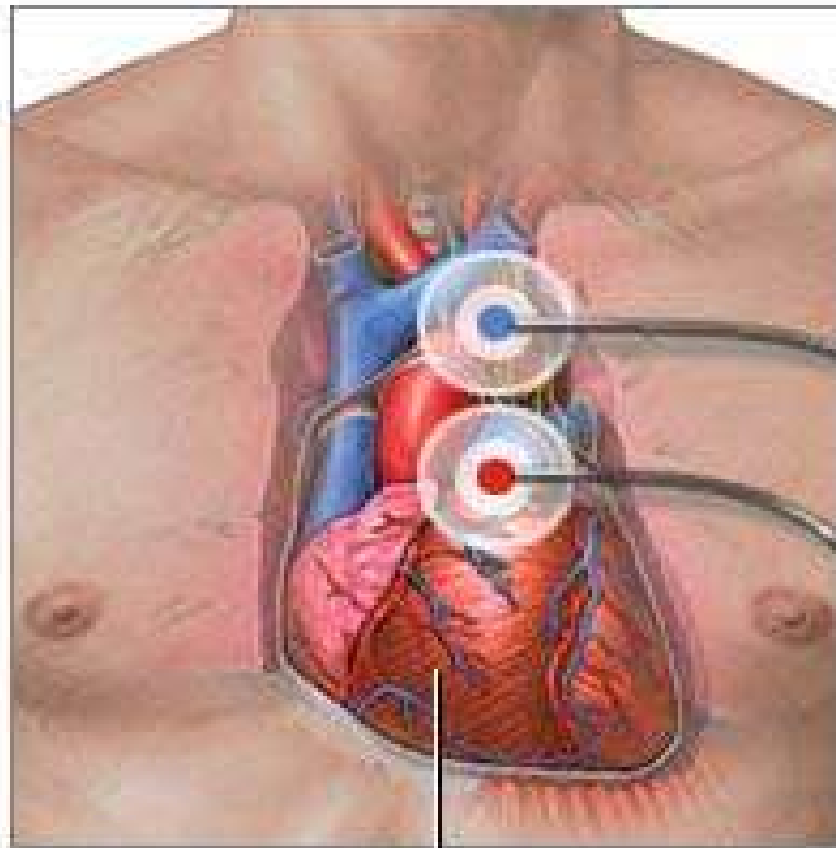


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Ventricular tachycardia

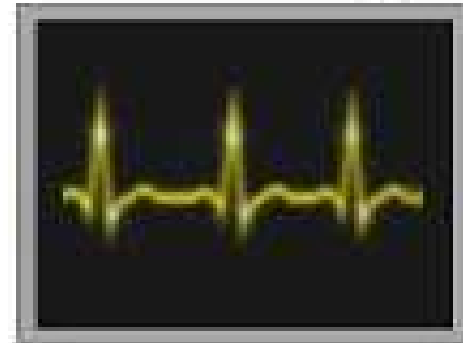


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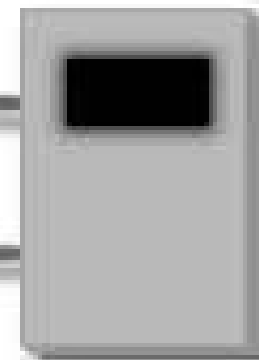


Heart

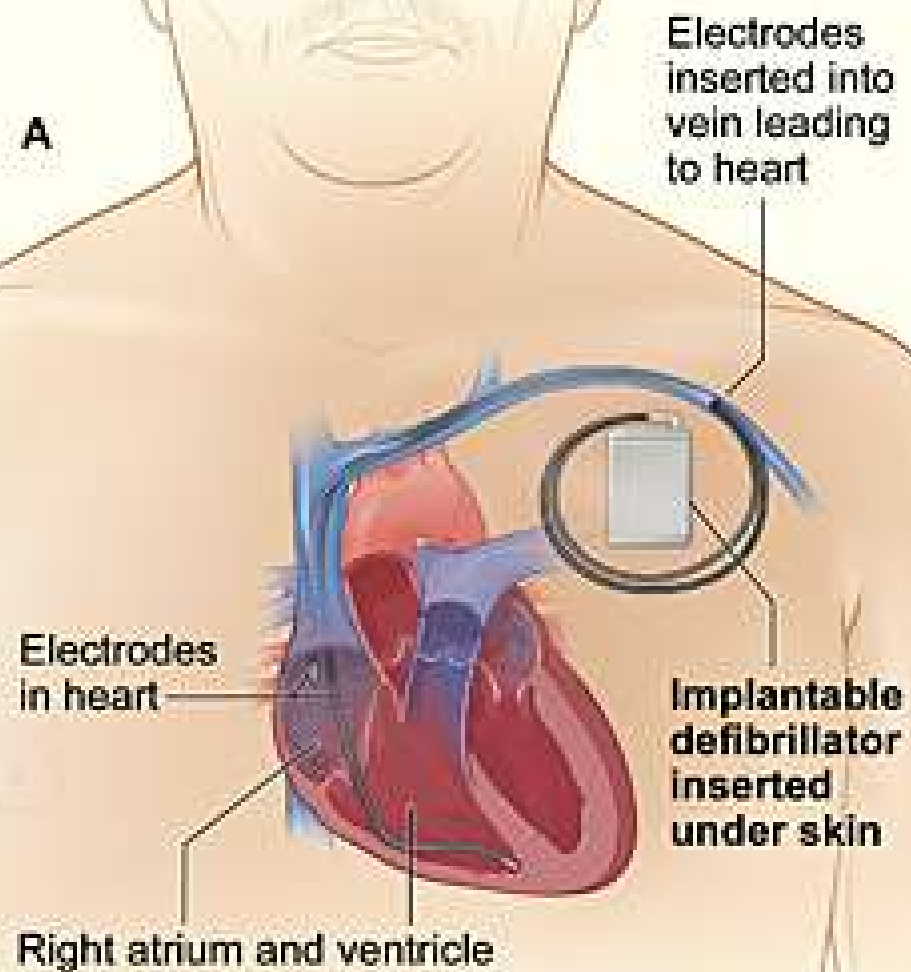
Electrocardiogram



Holter monitor



A



B

