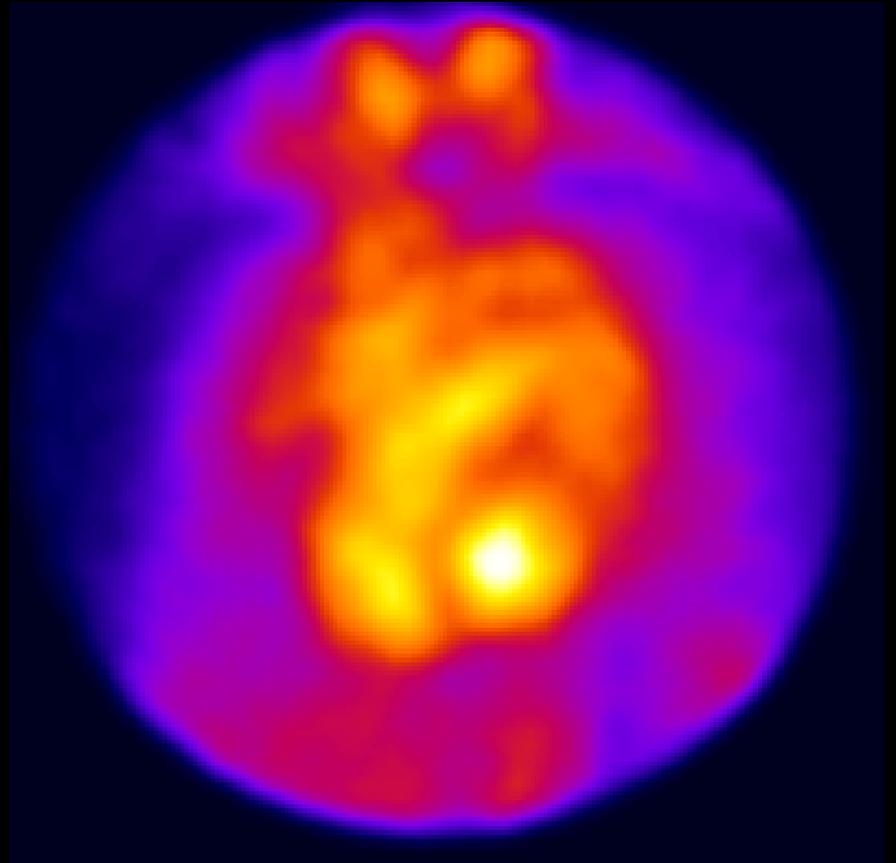
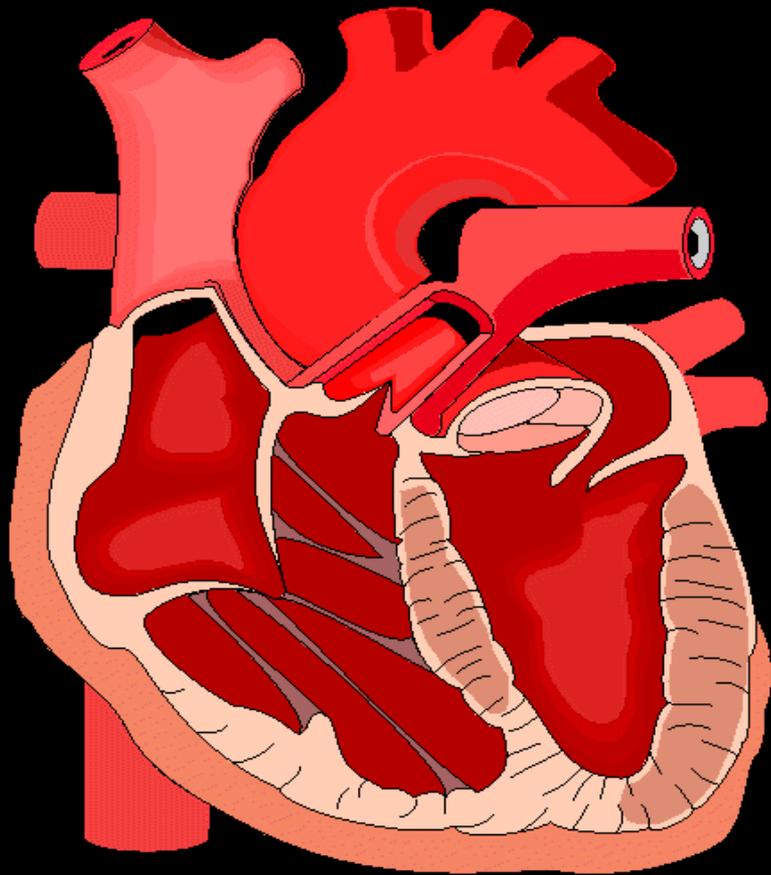
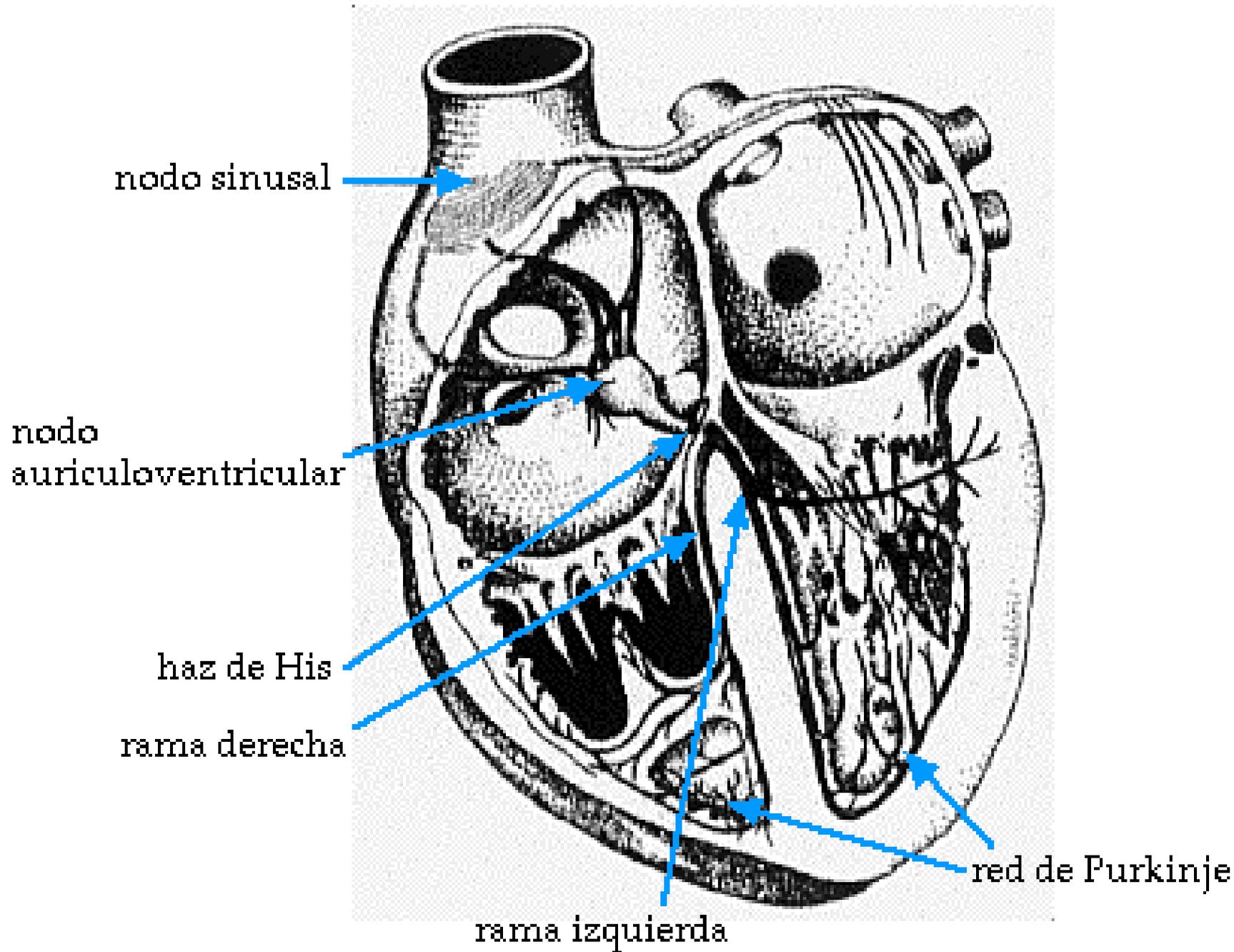


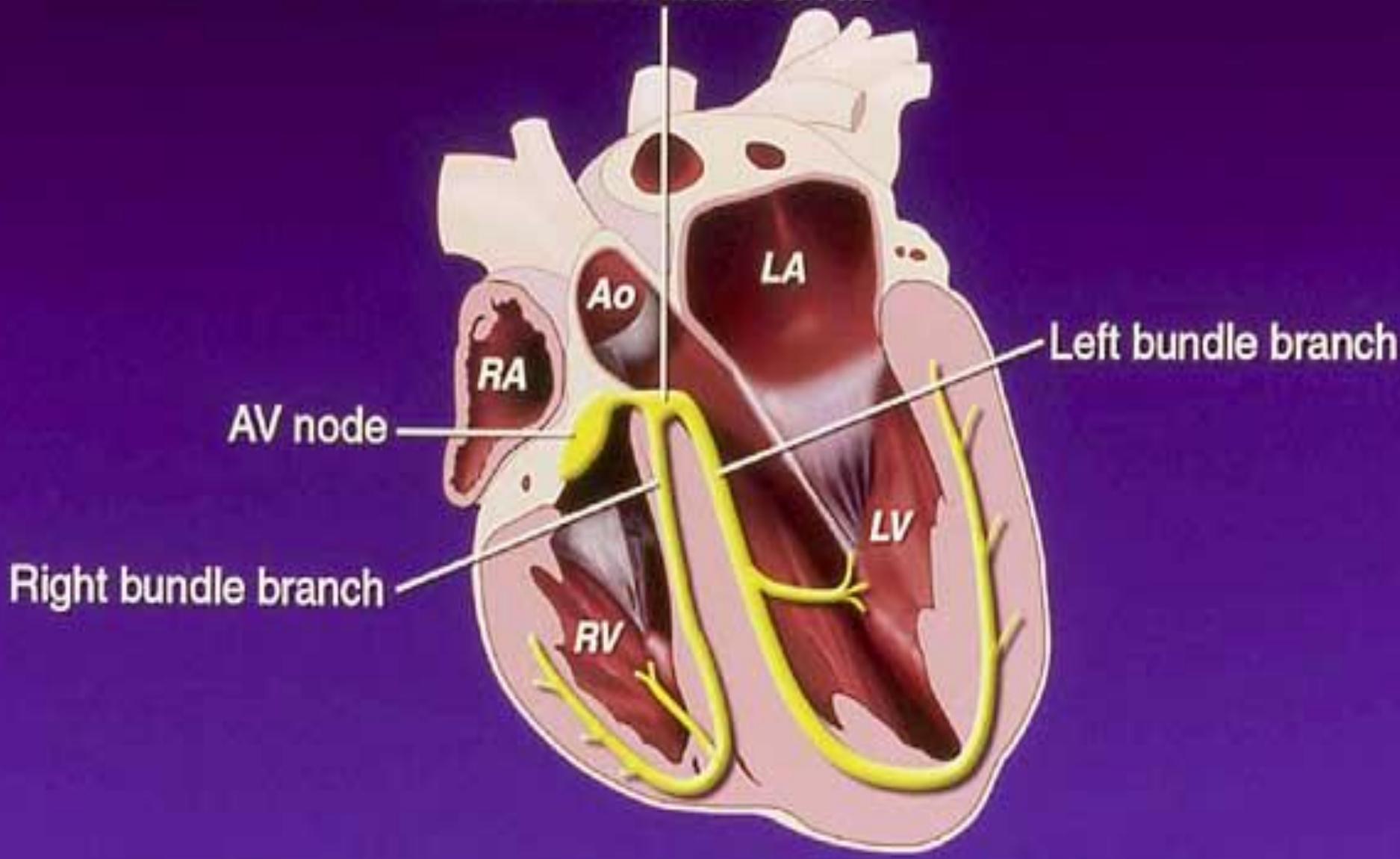
Acerca del ELECTROCARDIOGRAMA







Common bundle of His



AV node

Right bundle branch

Left bundle branch

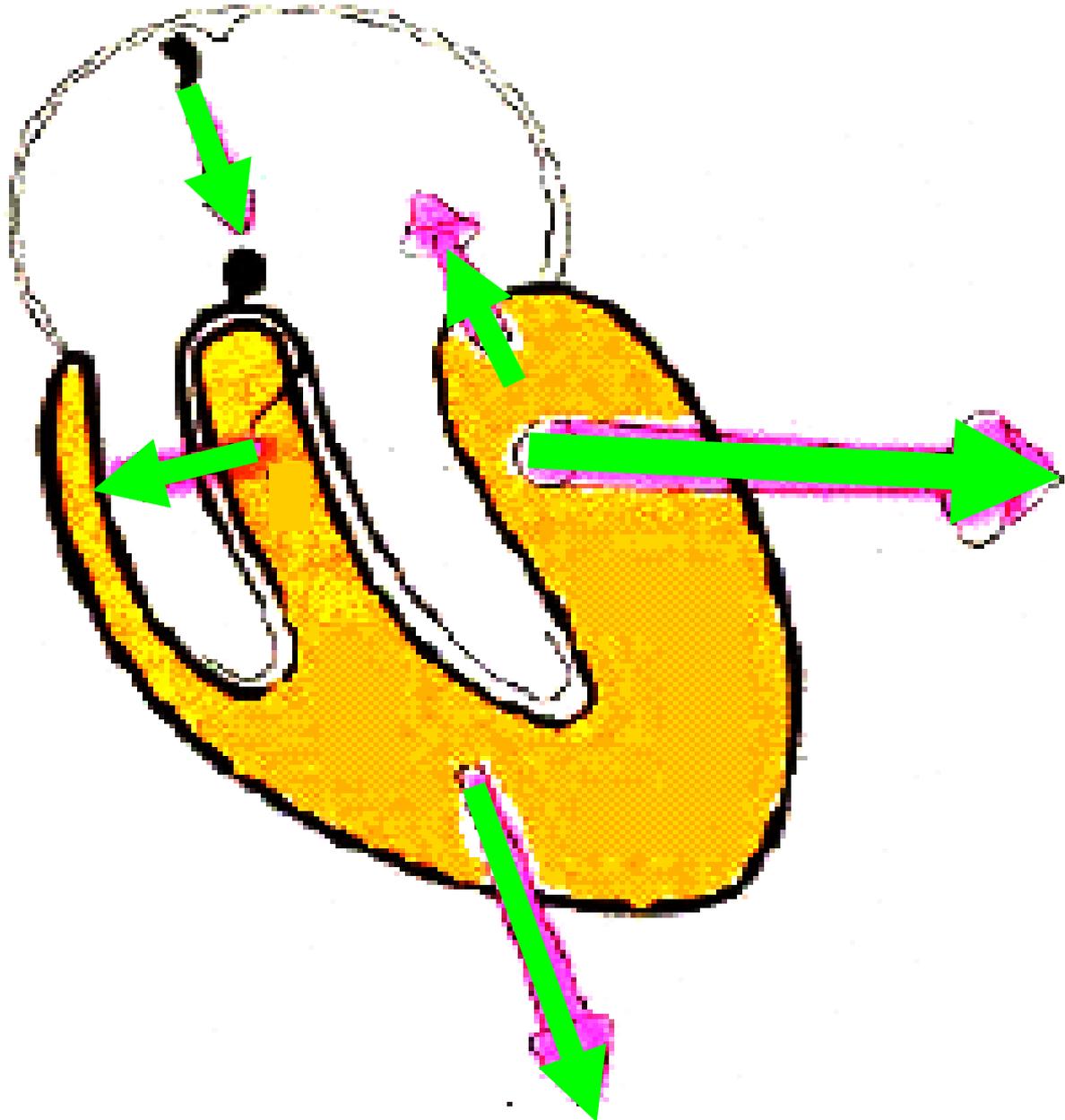
RA

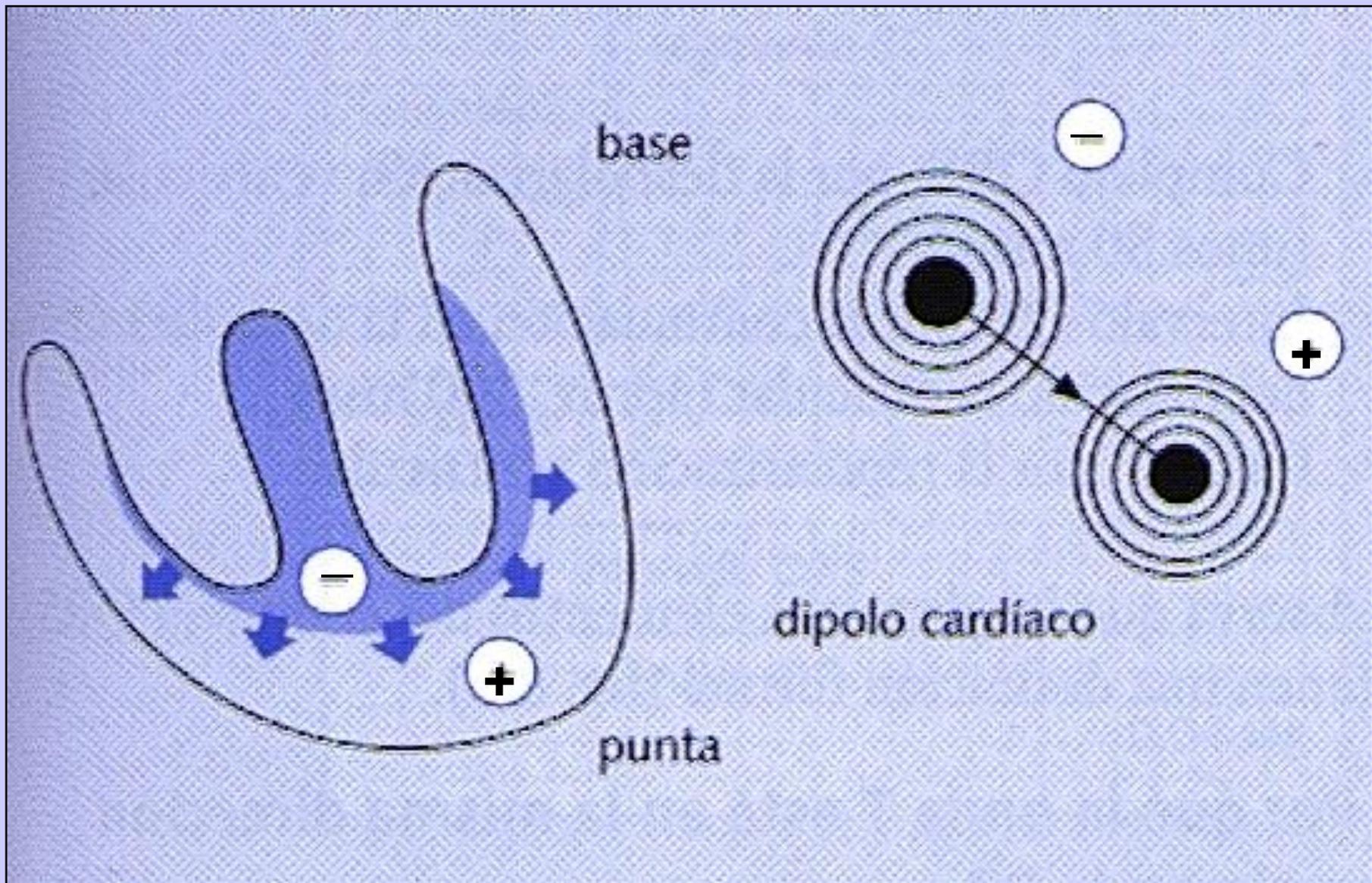
Ao

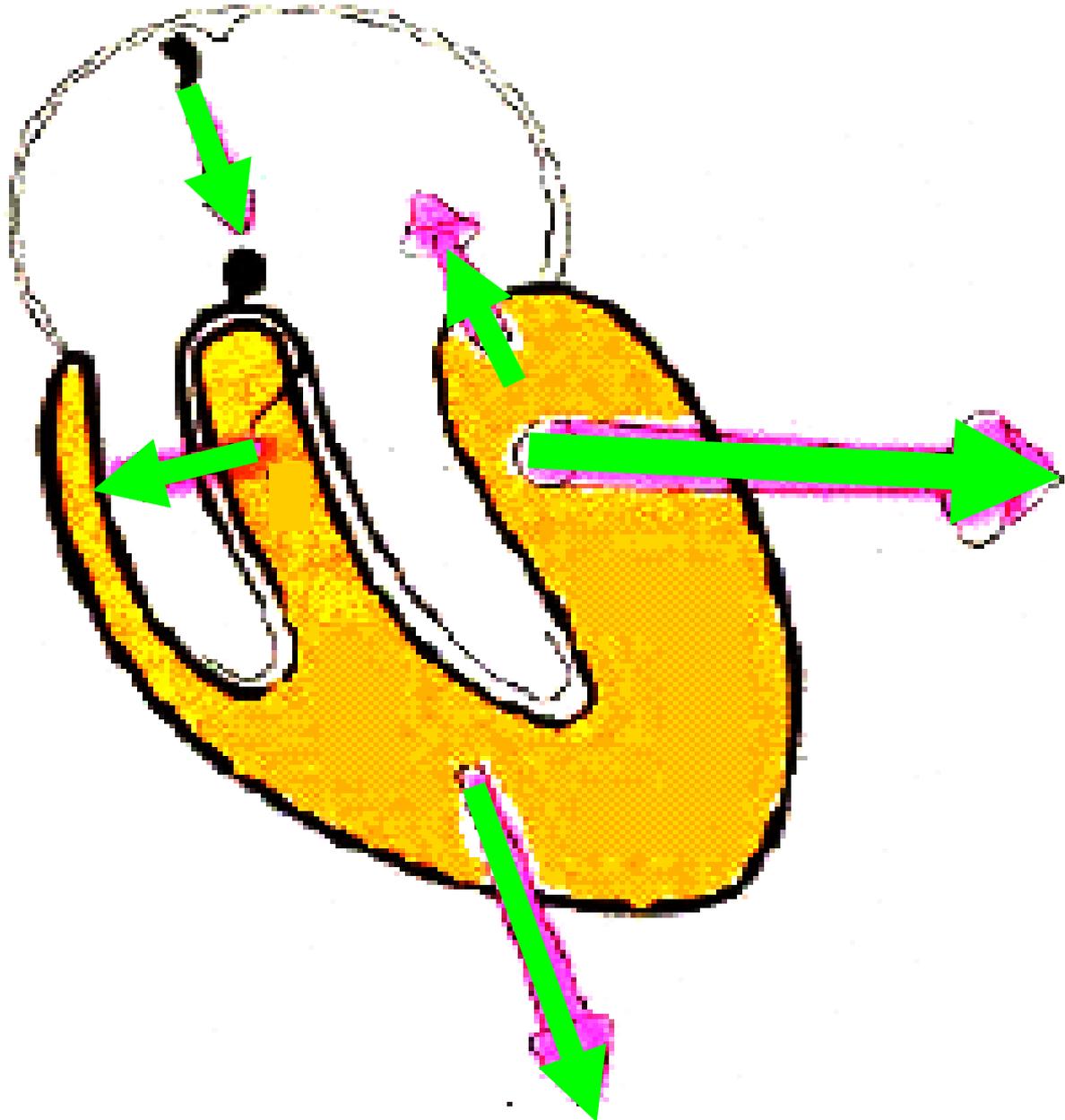
LA

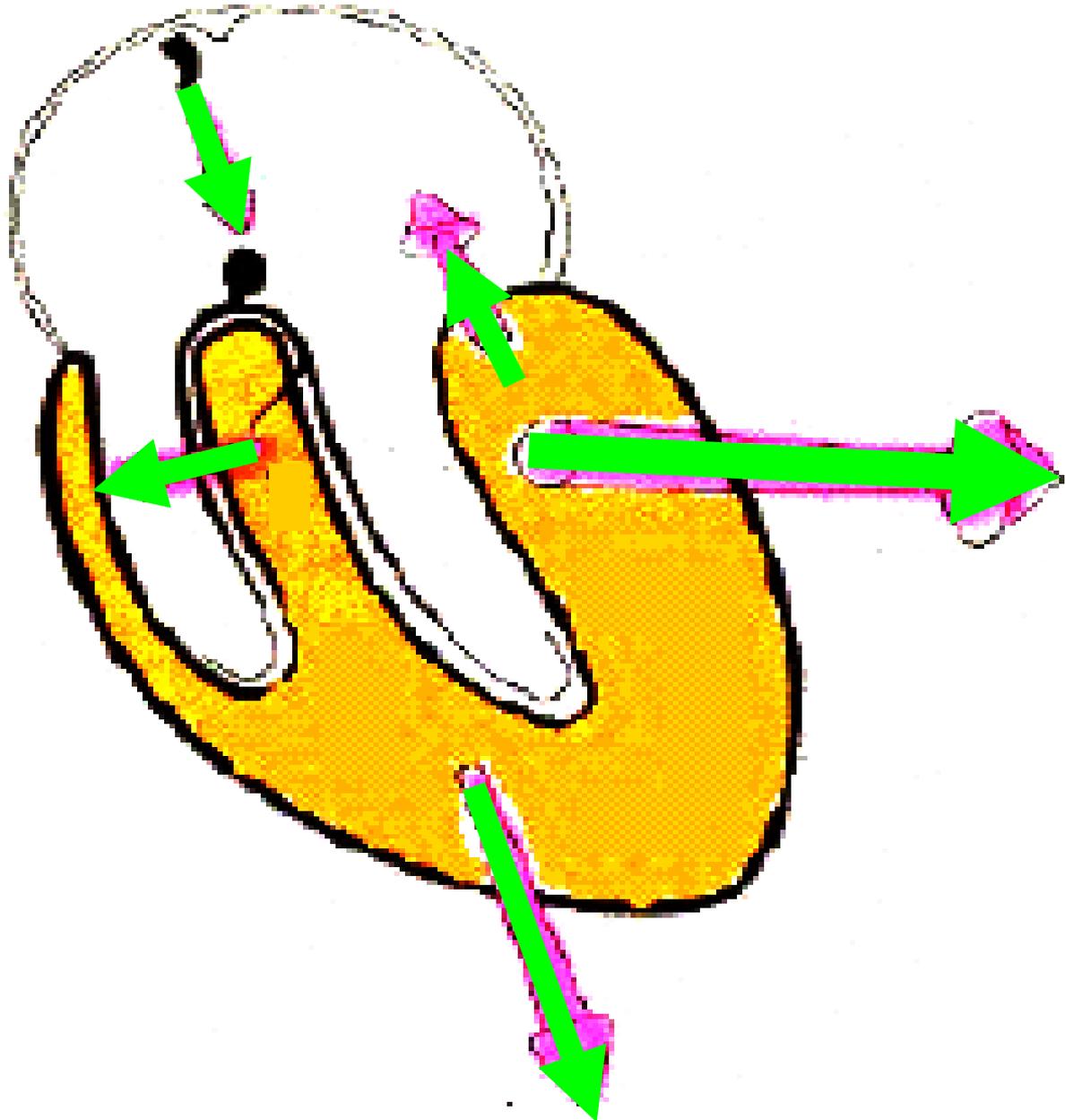
RV

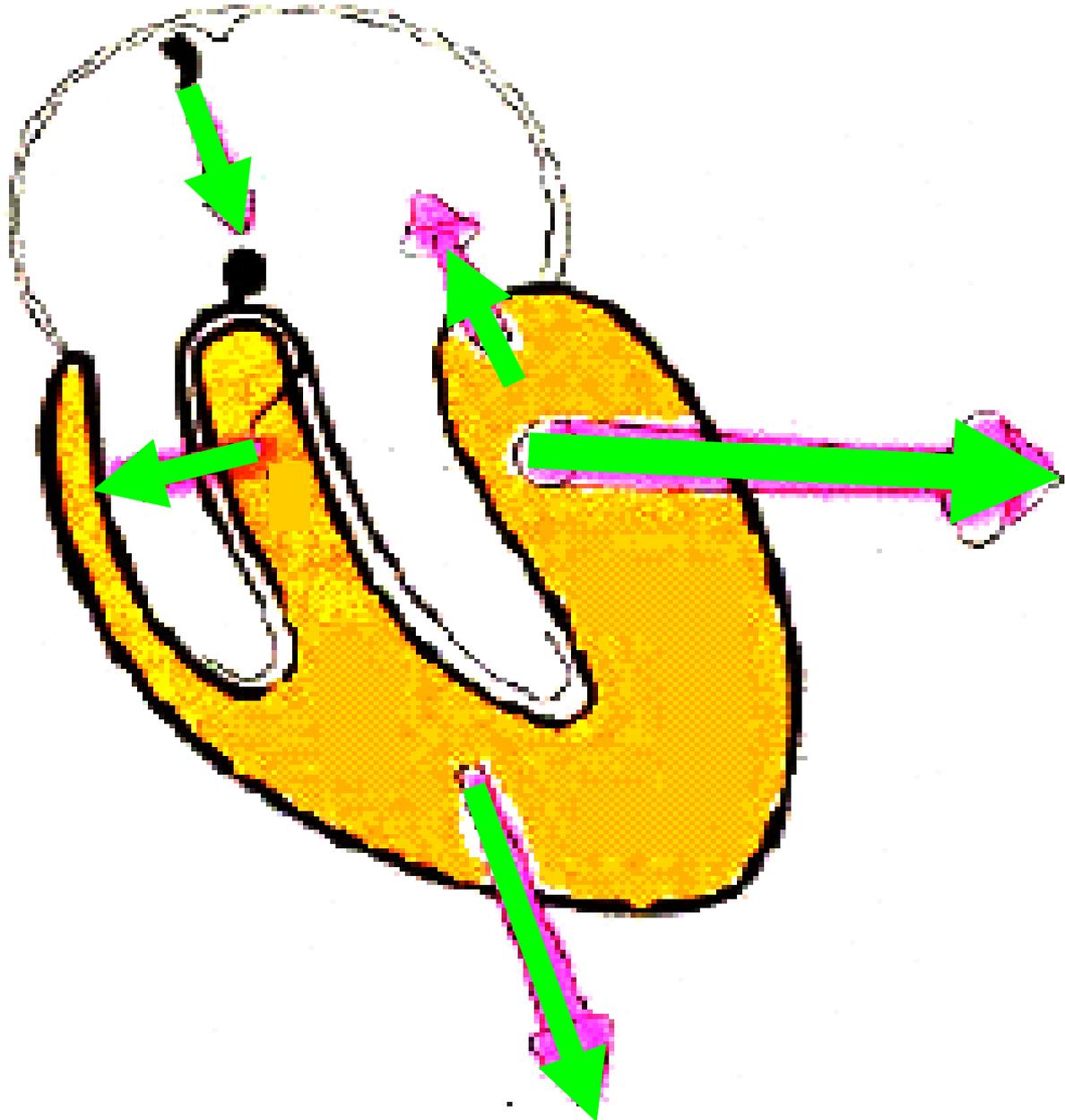
LV

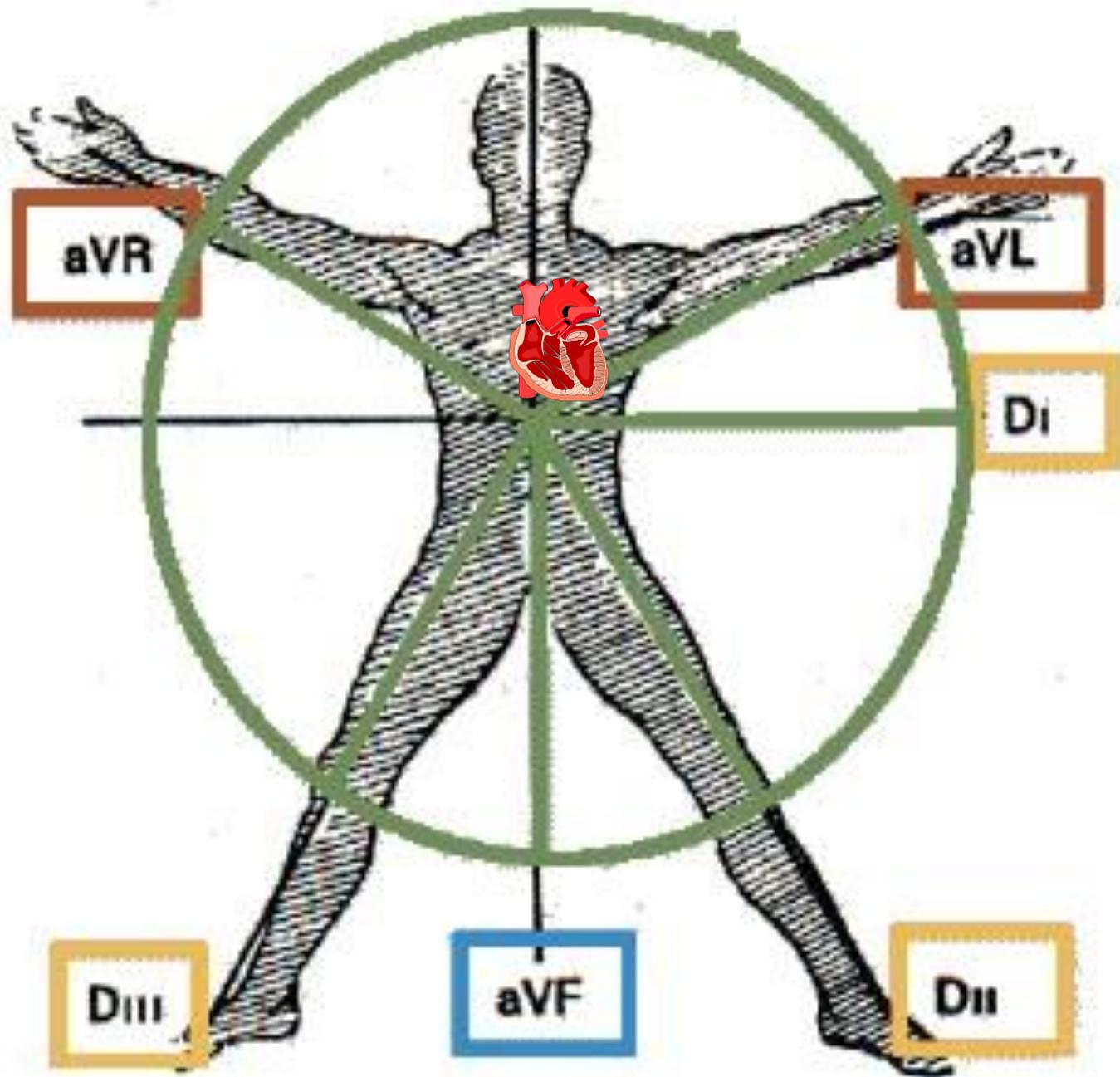




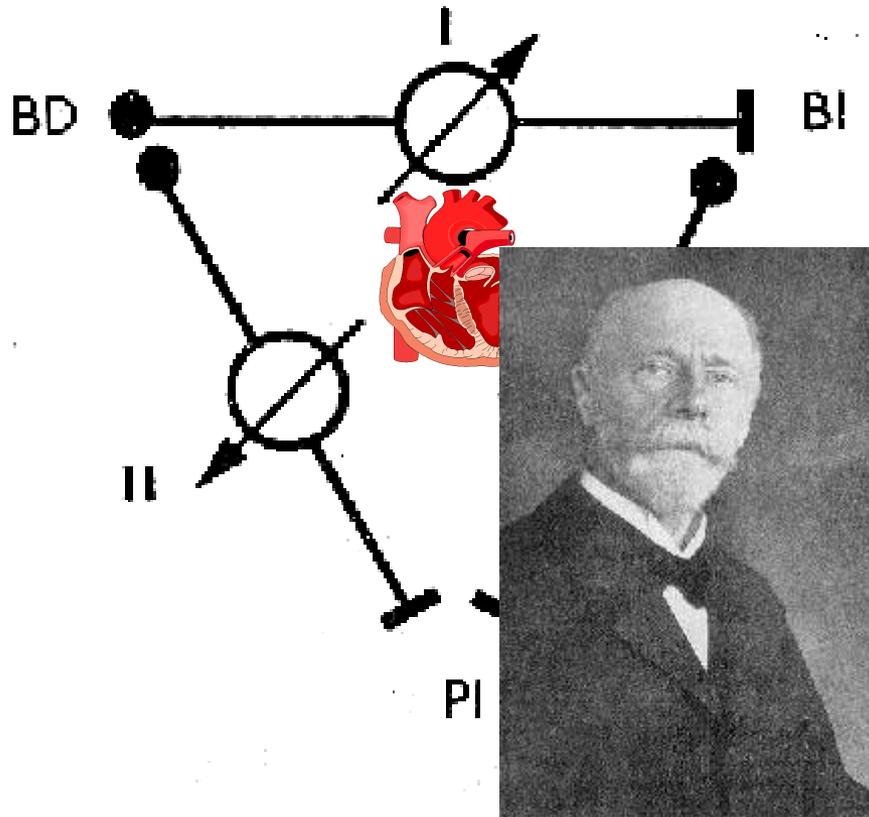






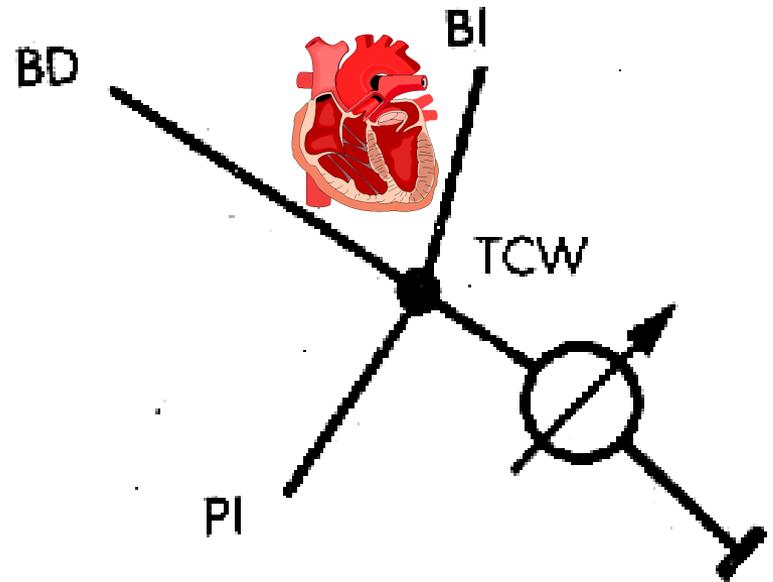


DERIVACIONES BIPOLARES Triángulo de Einthoven (1895)



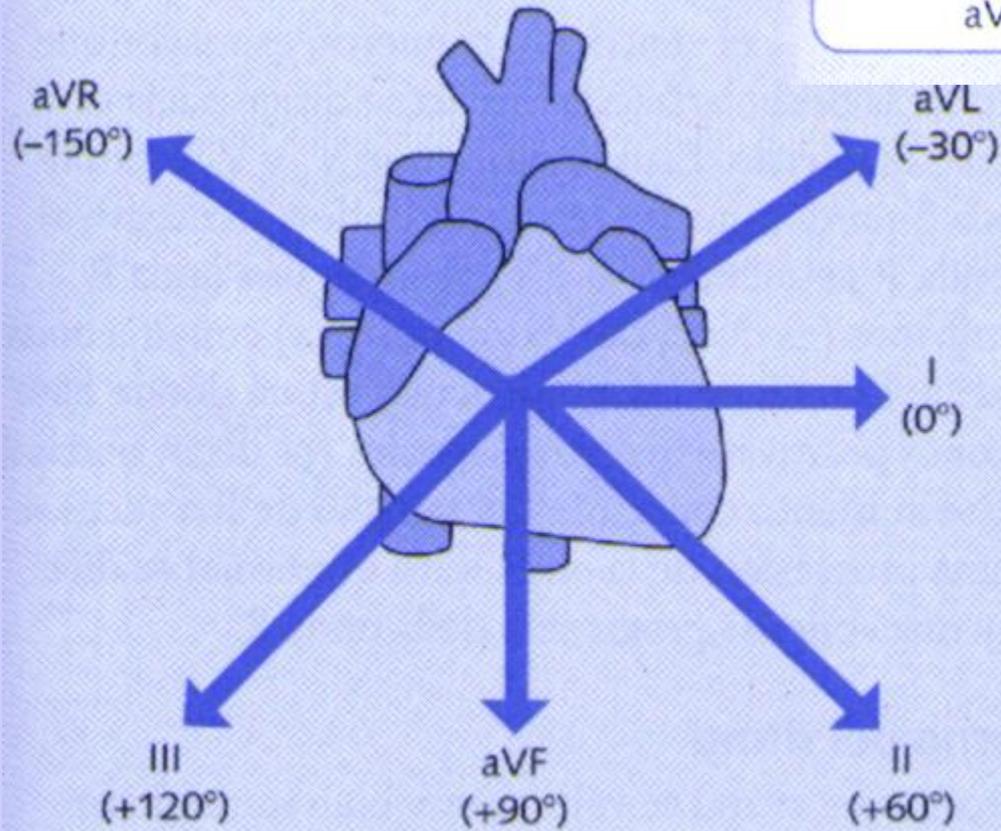
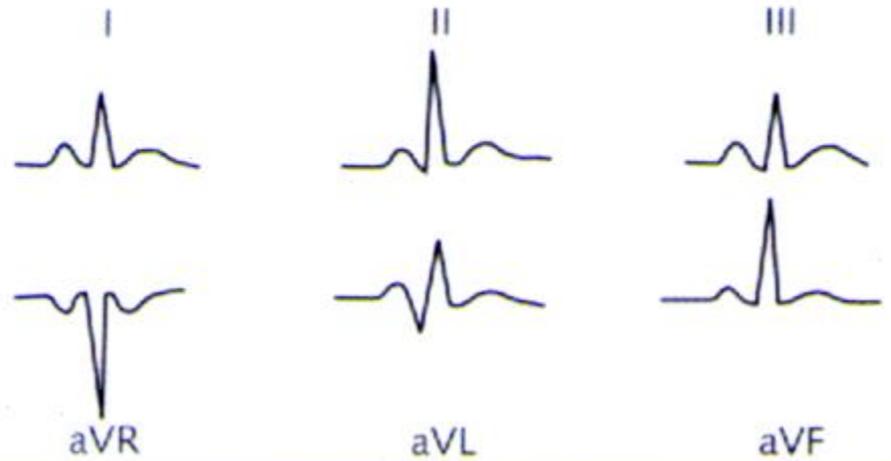
electrodo indiferente

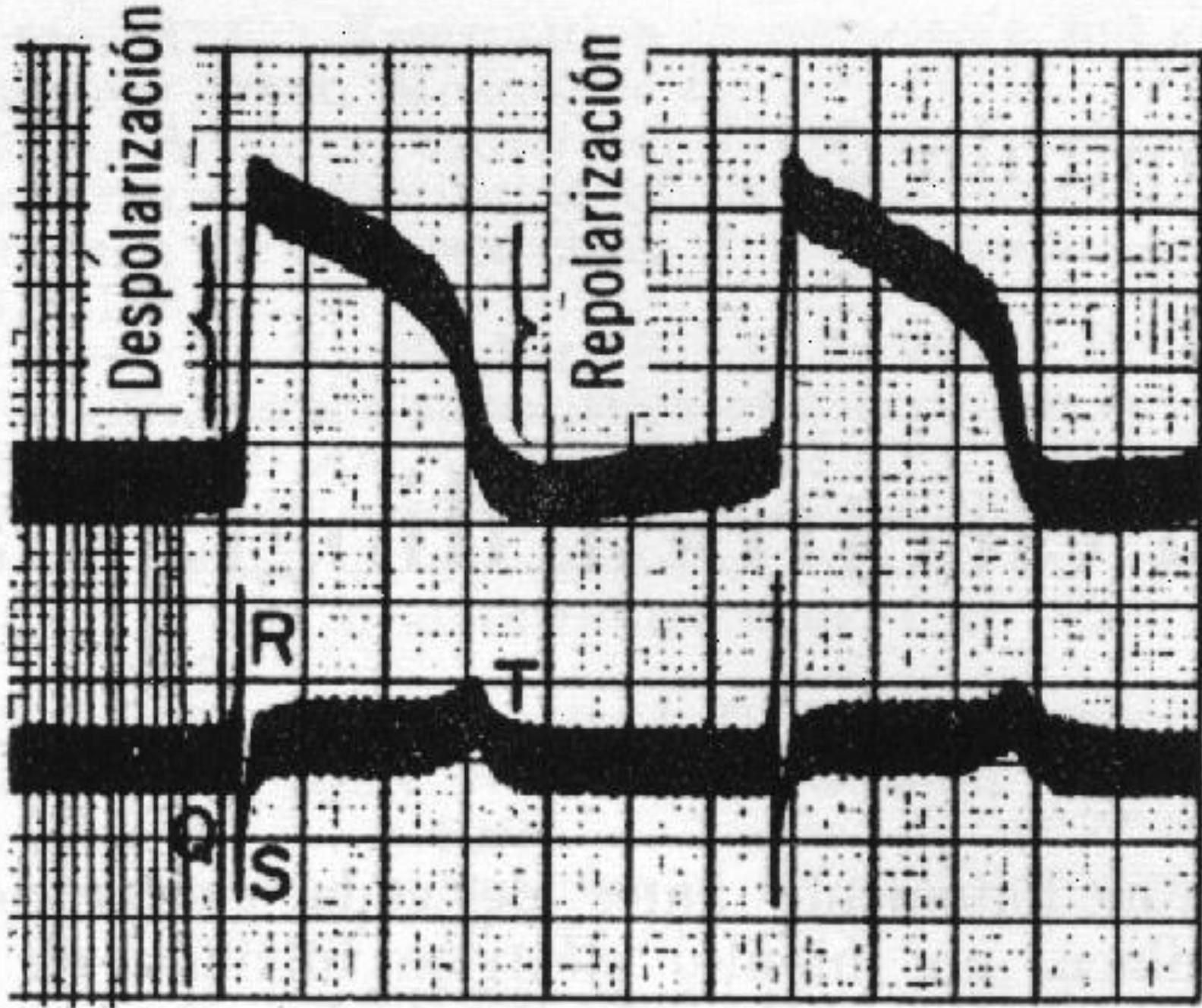
DERIVACIONES UNIPOLARES (V)



electrodo explorador

ondas normales



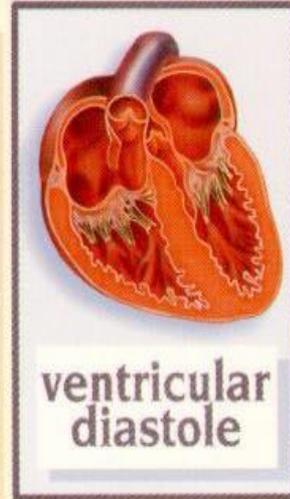
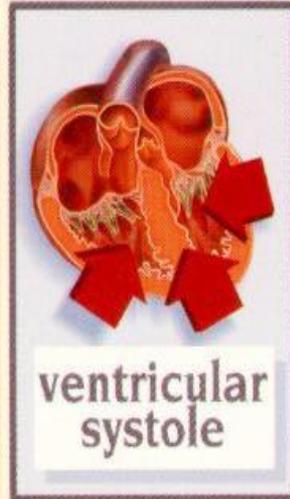
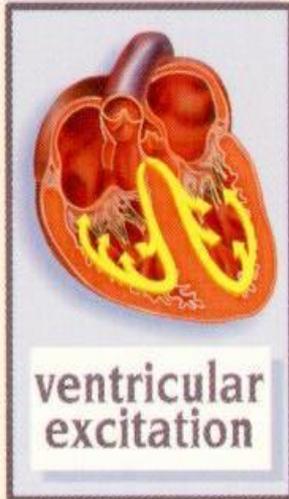
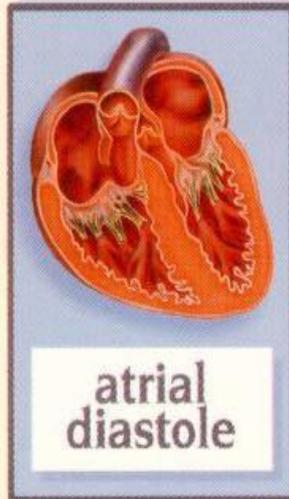
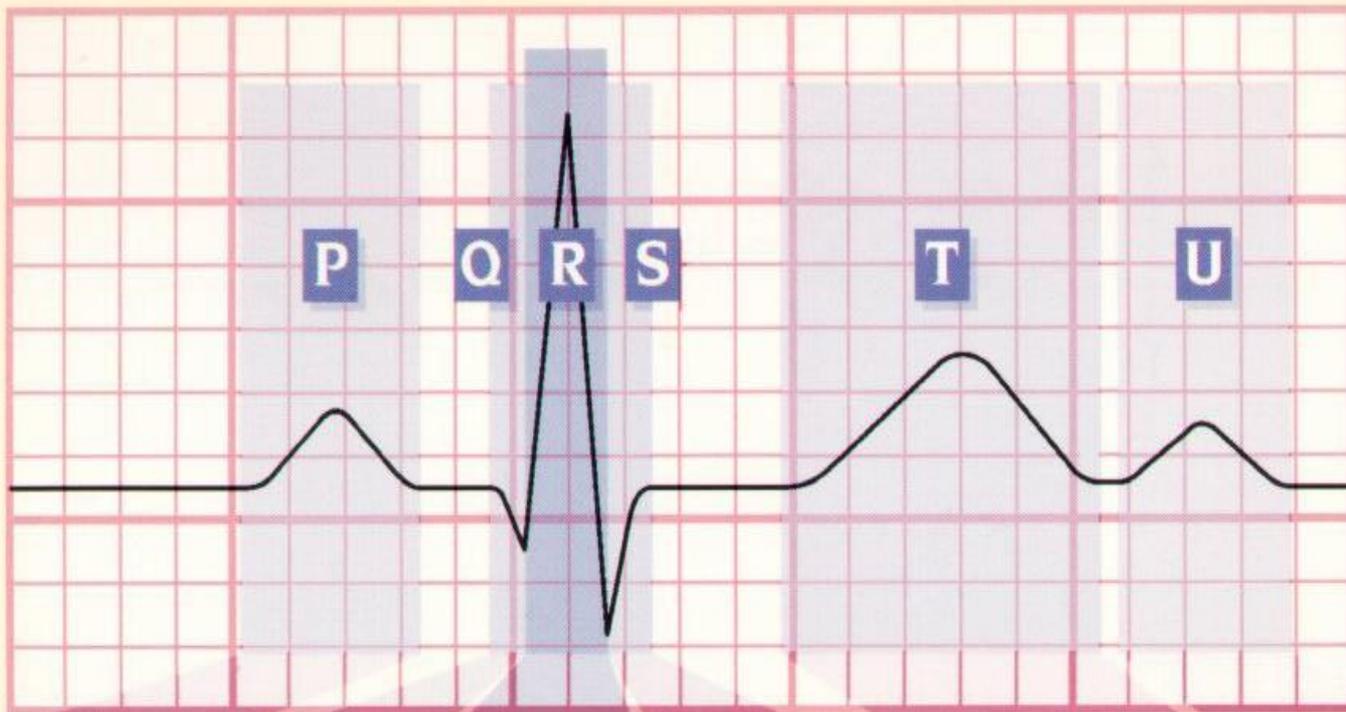


Despolarización

Repolarización

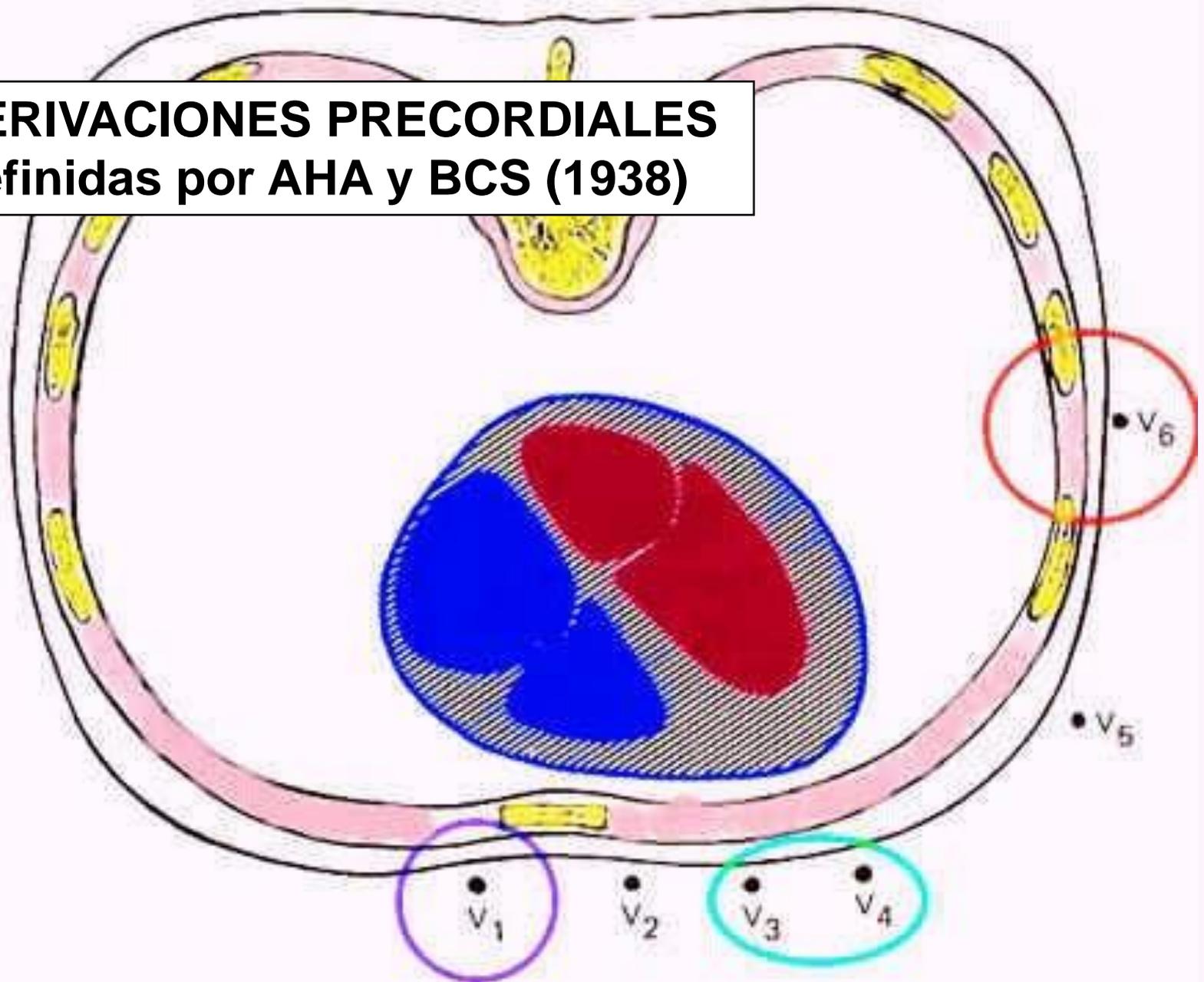
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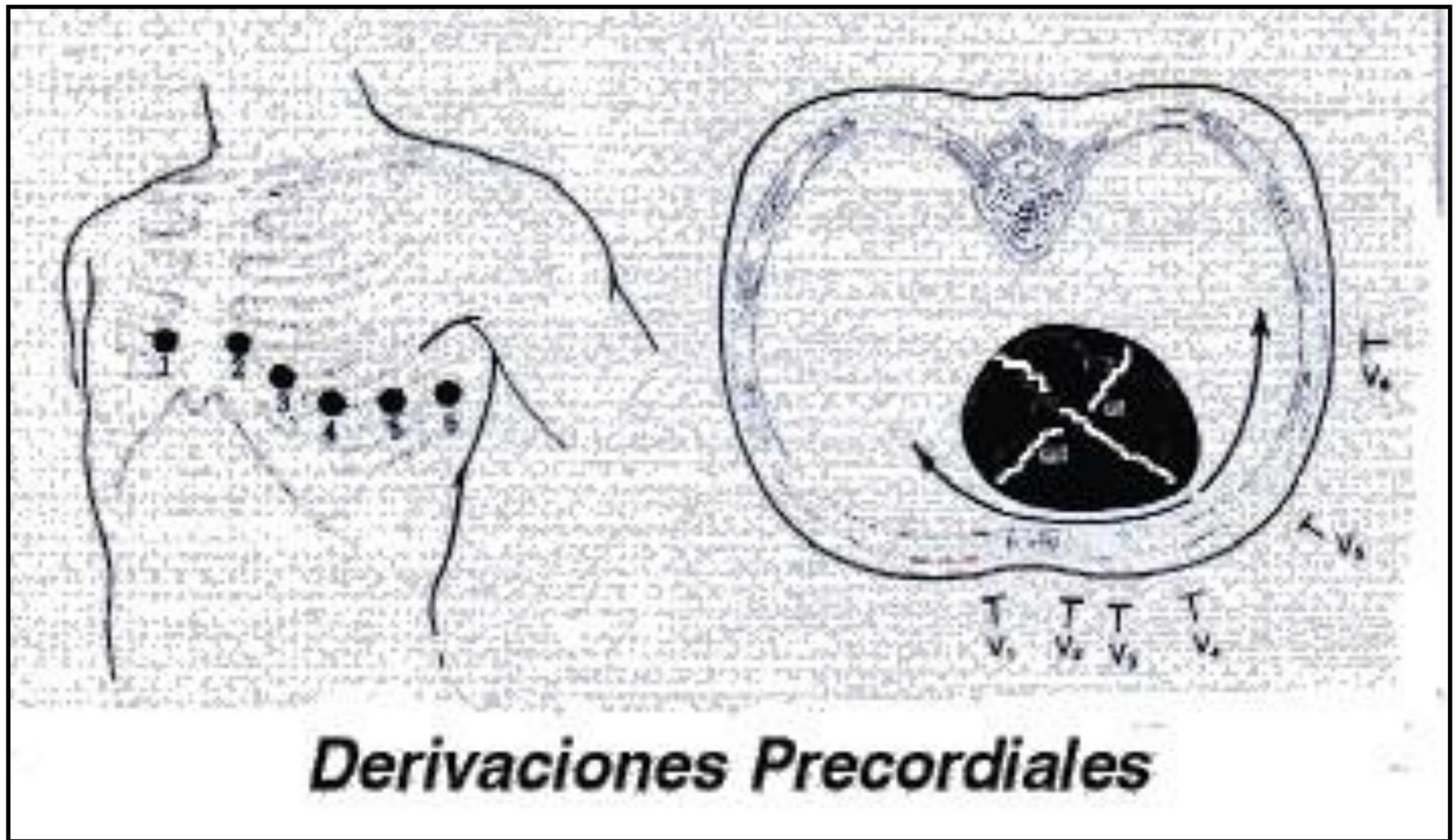
S

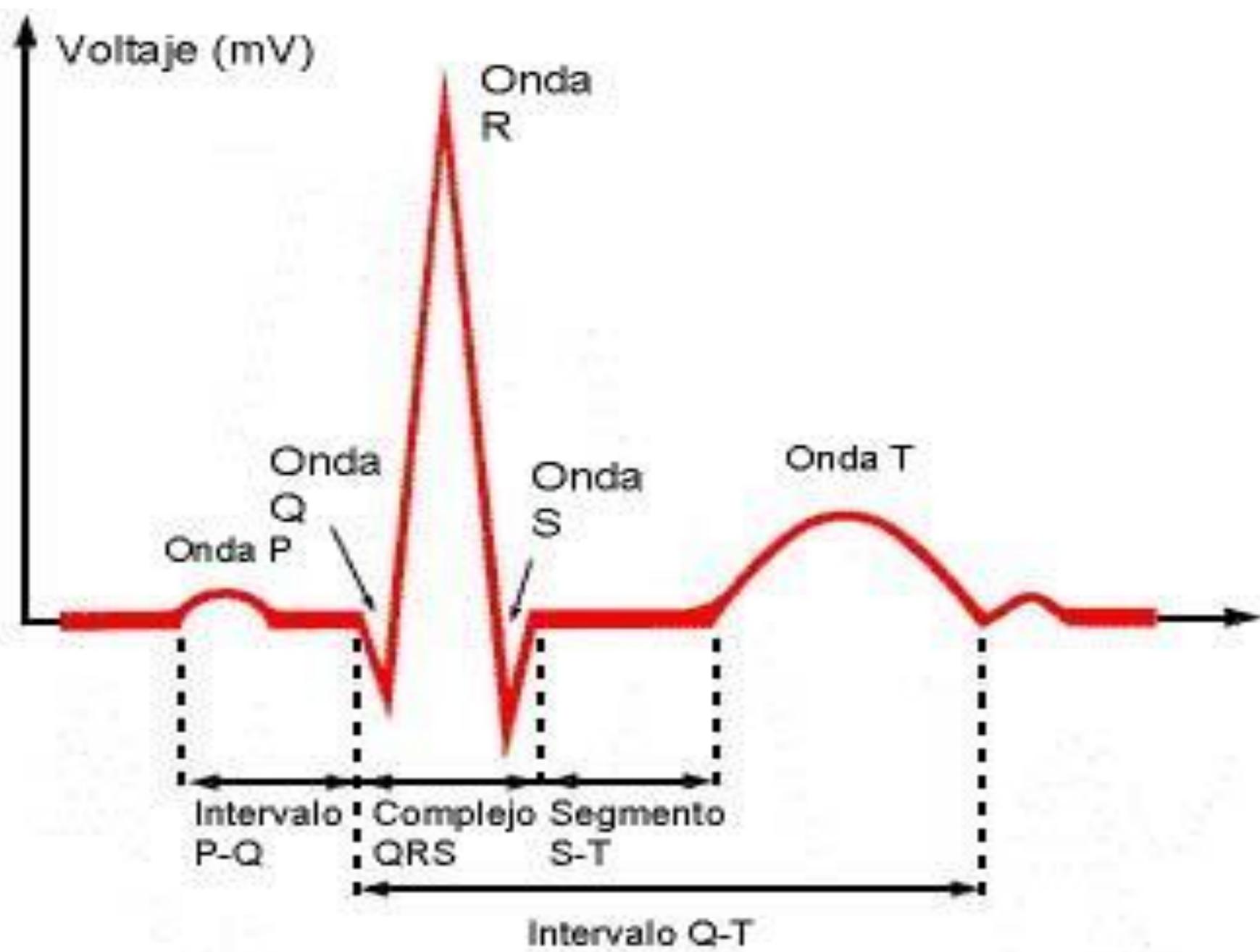


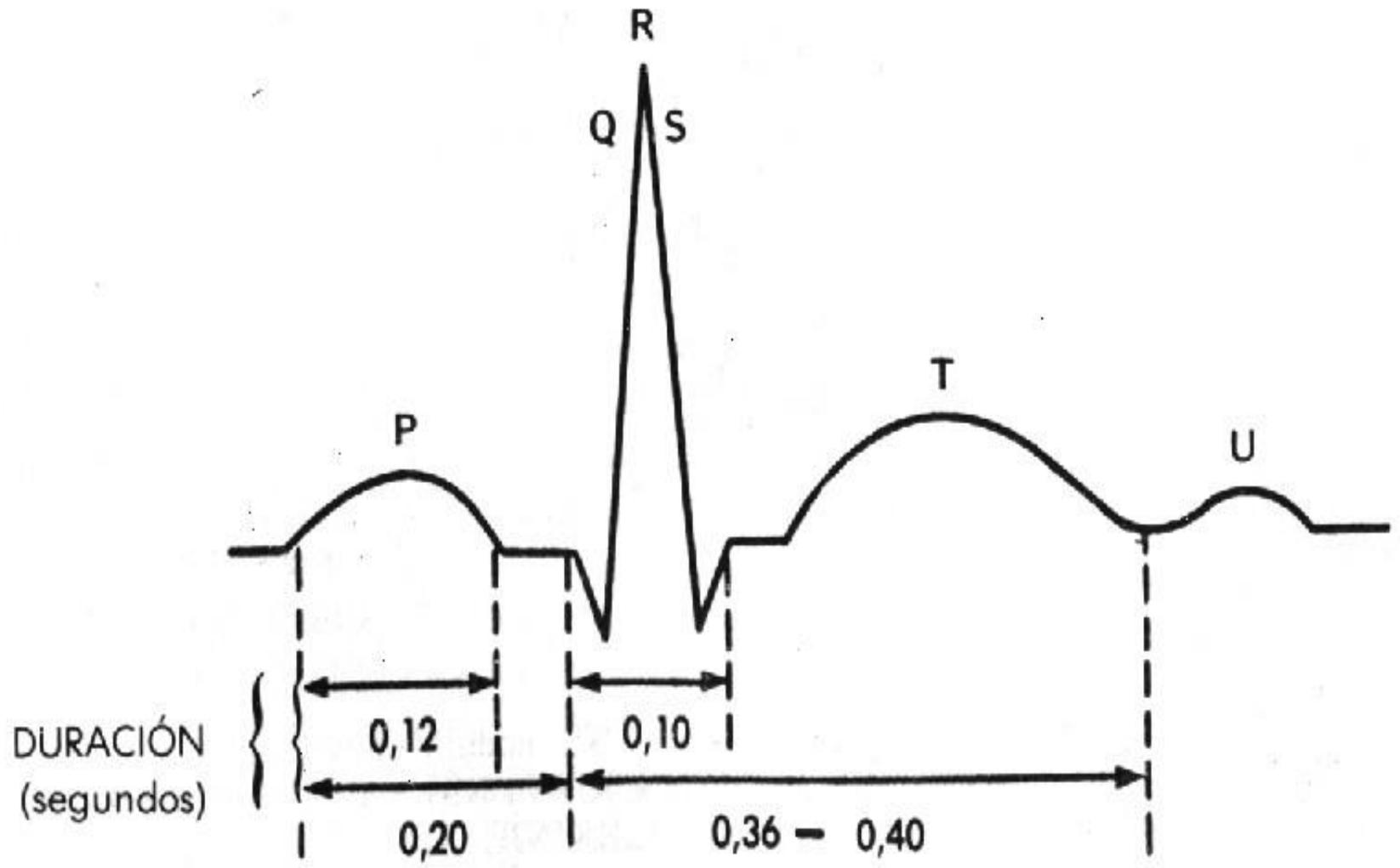
DERIVACIONES PRECORDIALES

Definidas por AHA y BCS (1938)

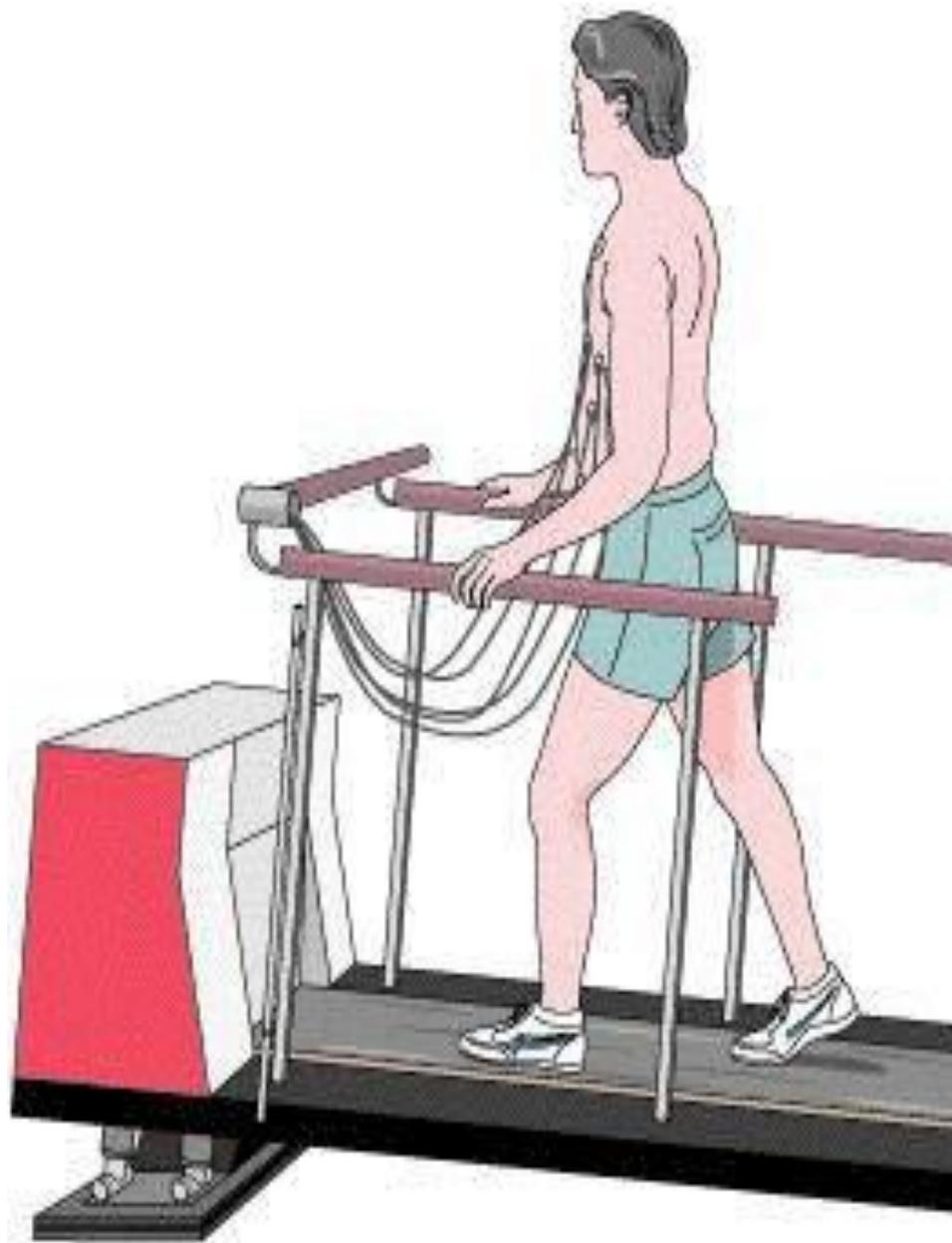




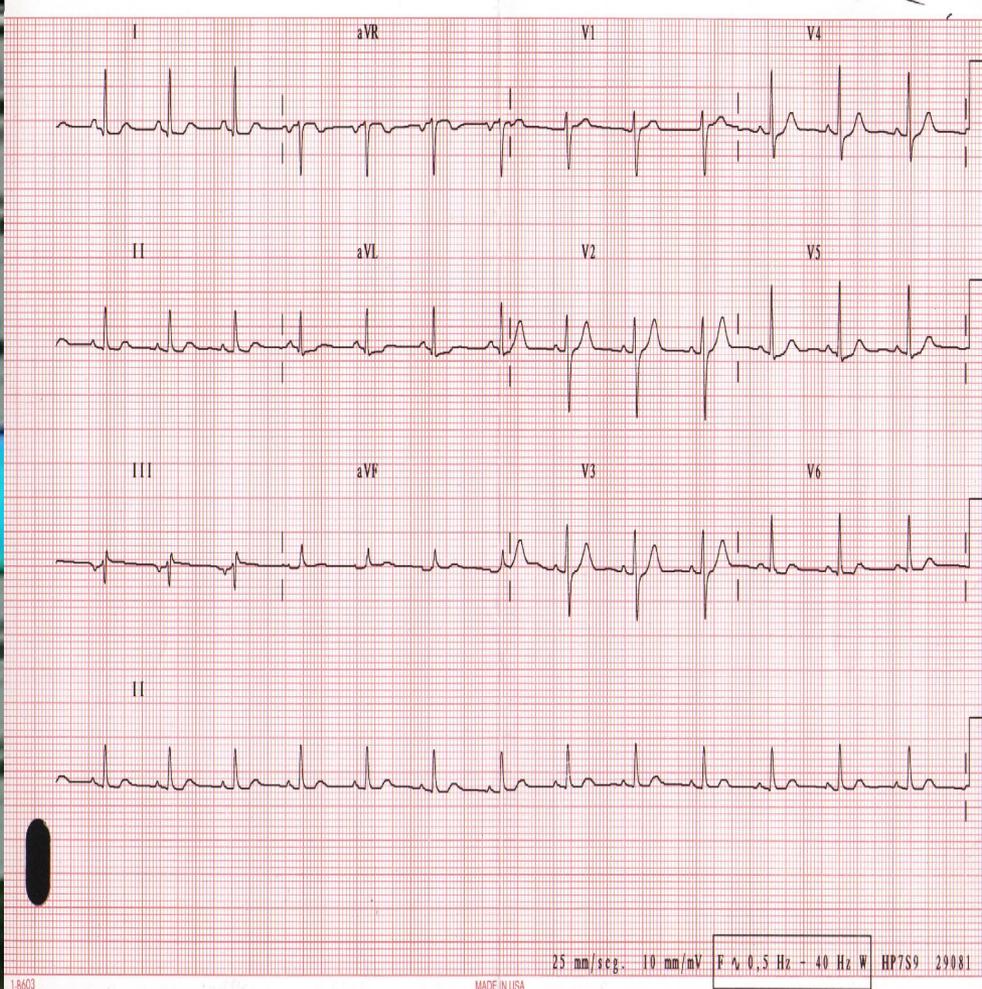
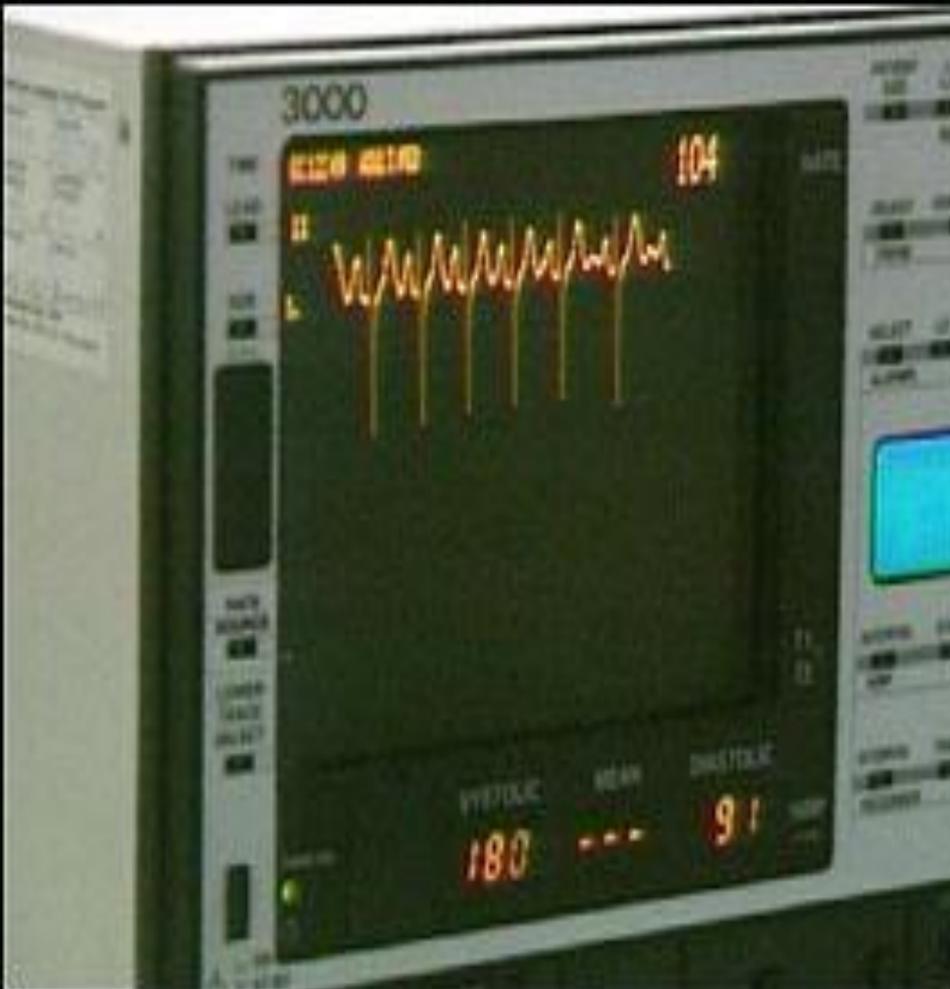


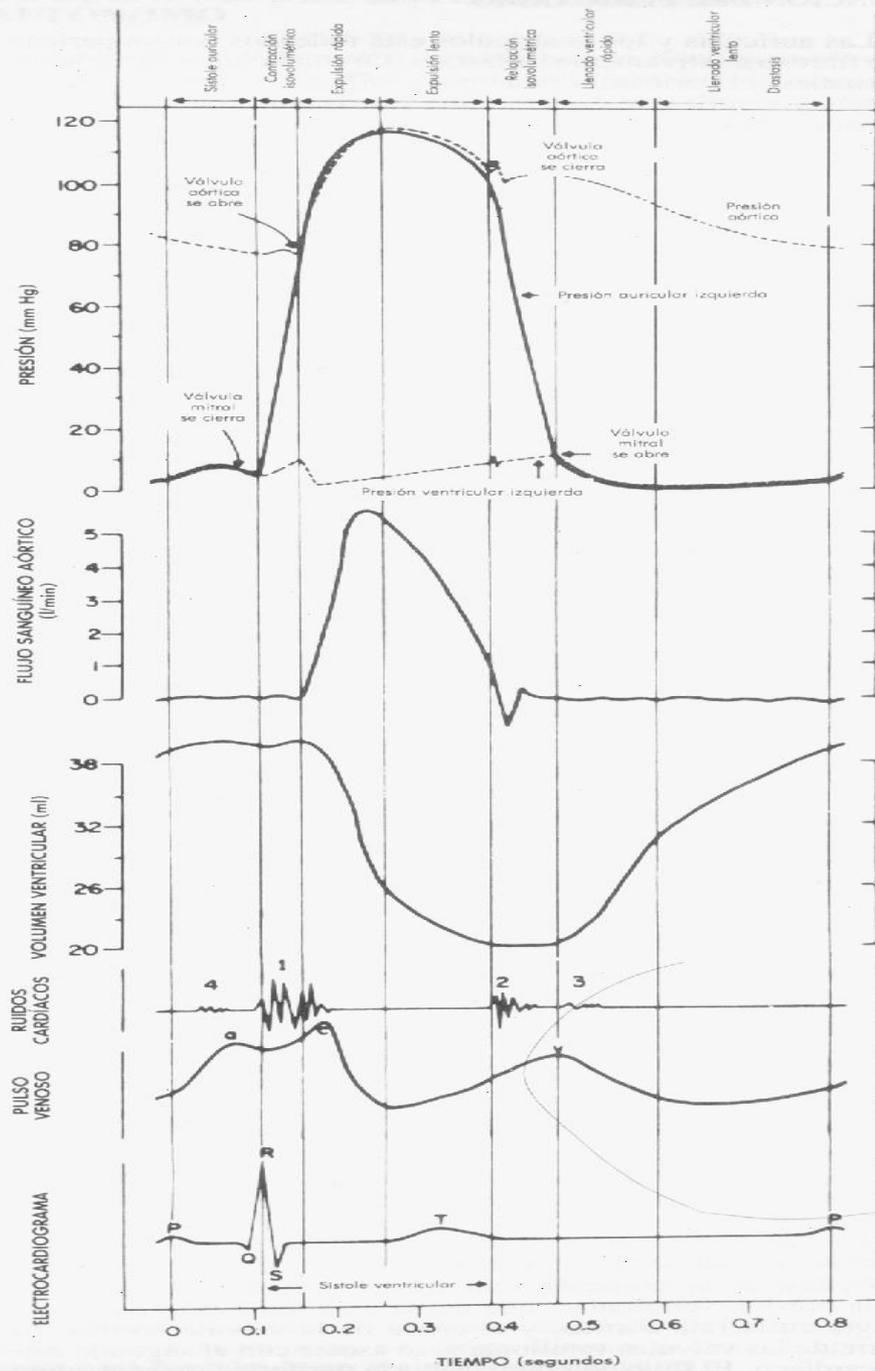






Holter Monitor





TIEMPO (segundos)

Variables Estudiadas en el ECG

Ritmo

Frecuencia

Duración

Amplitud Ondas

Eje Eléctrico

Morfología de
las Ondas

Artefactos

Interpretación
Global del ECG

Ondas

Segmentos

Intervalos

Complejo QRS

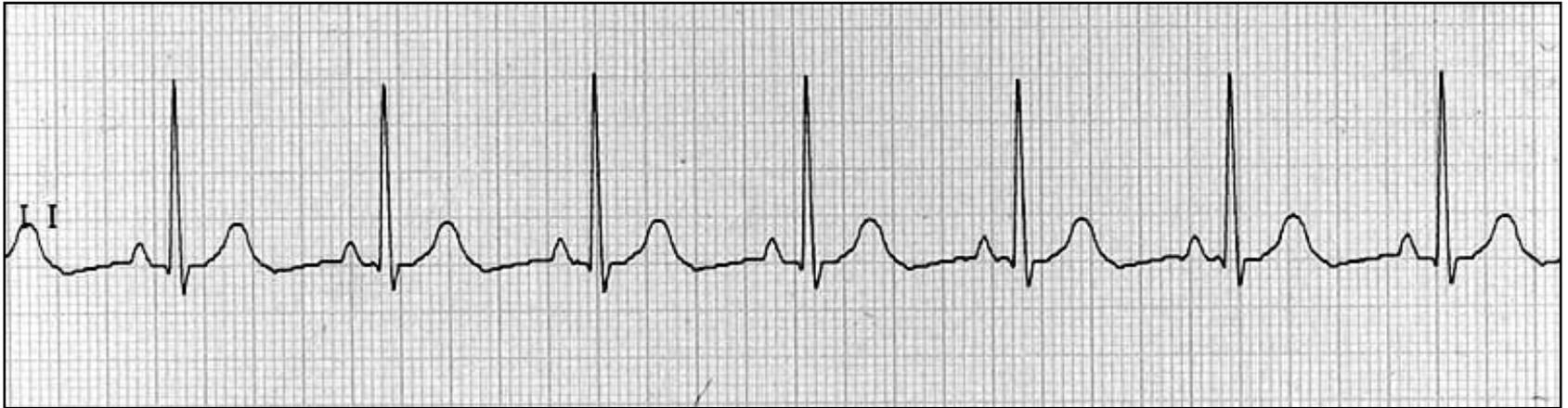
Valores Normales

Variables Estudiadas en el ECG

Valores Normales

Ritmo

Regular

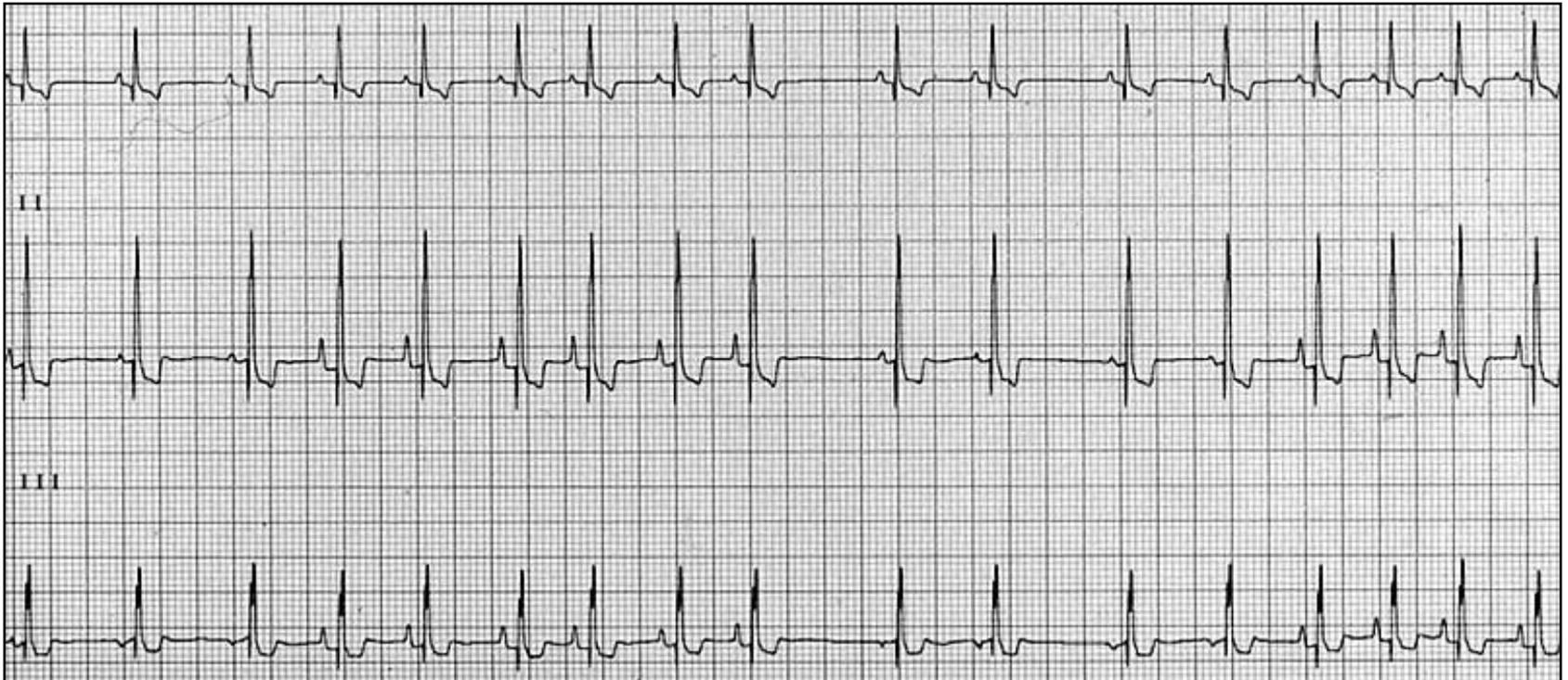


Variables Estudiadas en el ECG

Ejemplo Patología

Ritmo

Irregular



Variables Estudiadas en el ECG

Valores Normales

Frecuencia

Intervalo entre R - 1 seg = 60 lpm



Variables Estudiadas en el ECG

Duración

Ondas

Segmentos

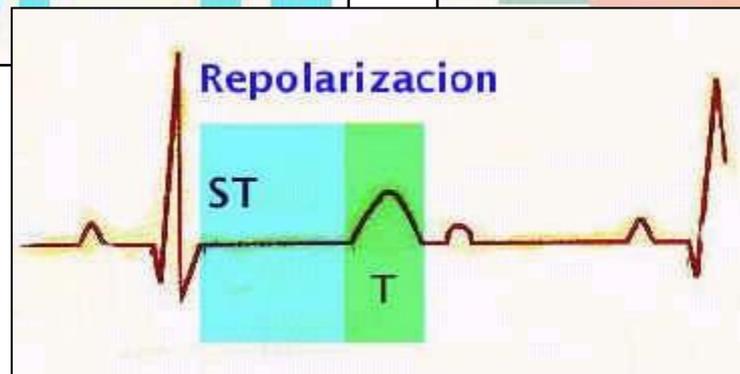
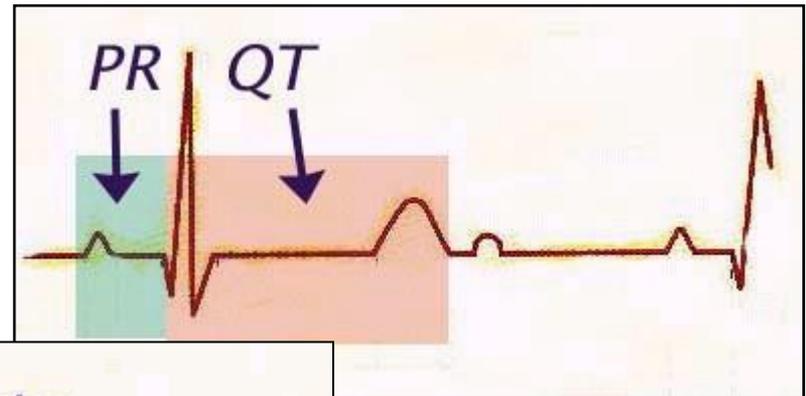
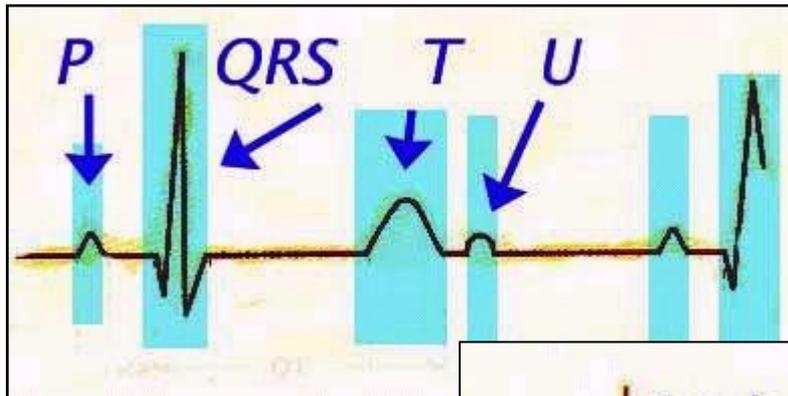
Intervalos

Valores Normales

Complejo QRS = 0.1 - 0.12 seg
Onda P = 0.12 seg

Segmento ST = Morfología

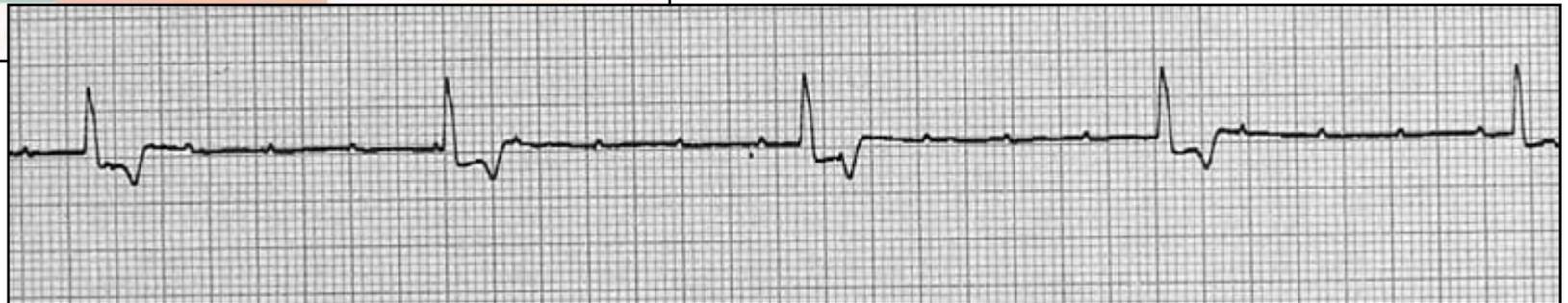
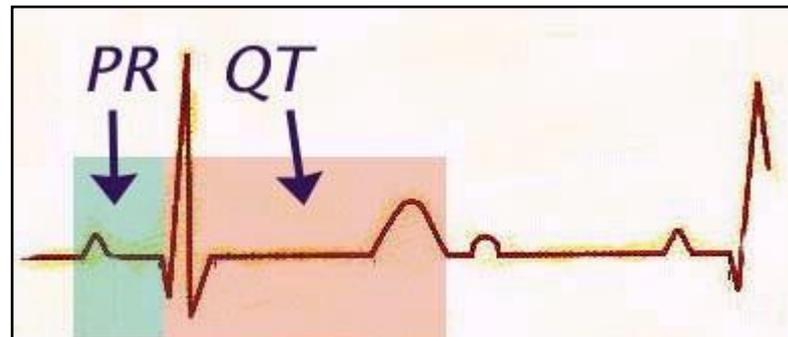
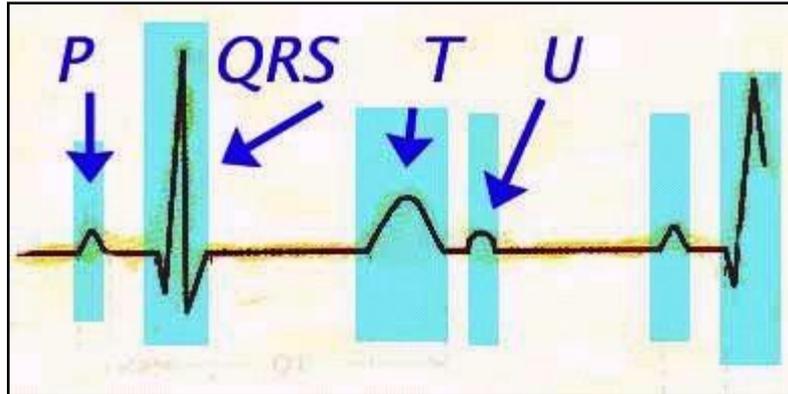
Intervalo PQ o PR = 0.12 - 0.2 seg
Intervalo QTf = 0.35 - 0.45 seg



Variables Estudiadas en el ECG

Duración

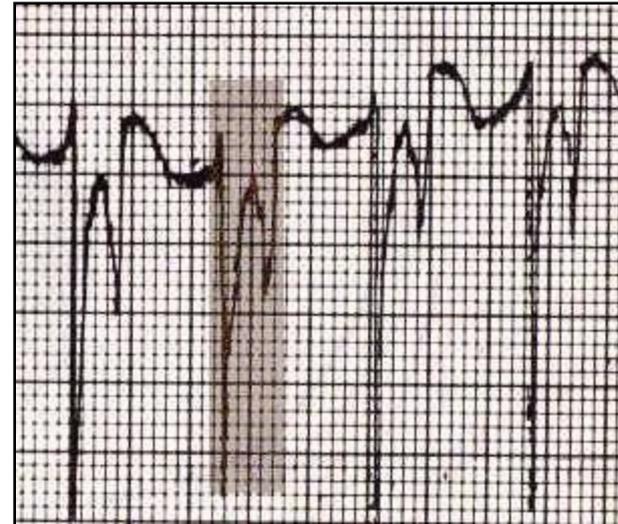
Ondas



Ejemplo Patología

Segmentos

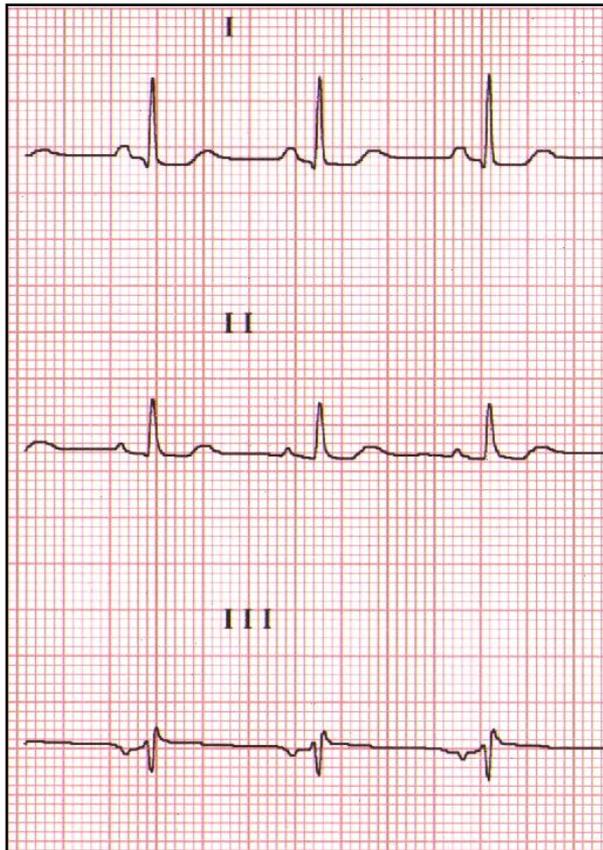
Intervalos



Variables Estudiadas en el ECG

Valores Normales

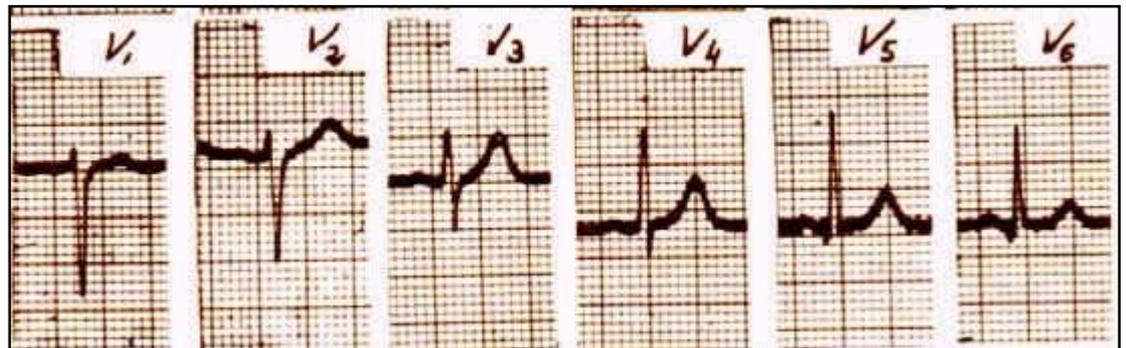
Amplitud Ondas

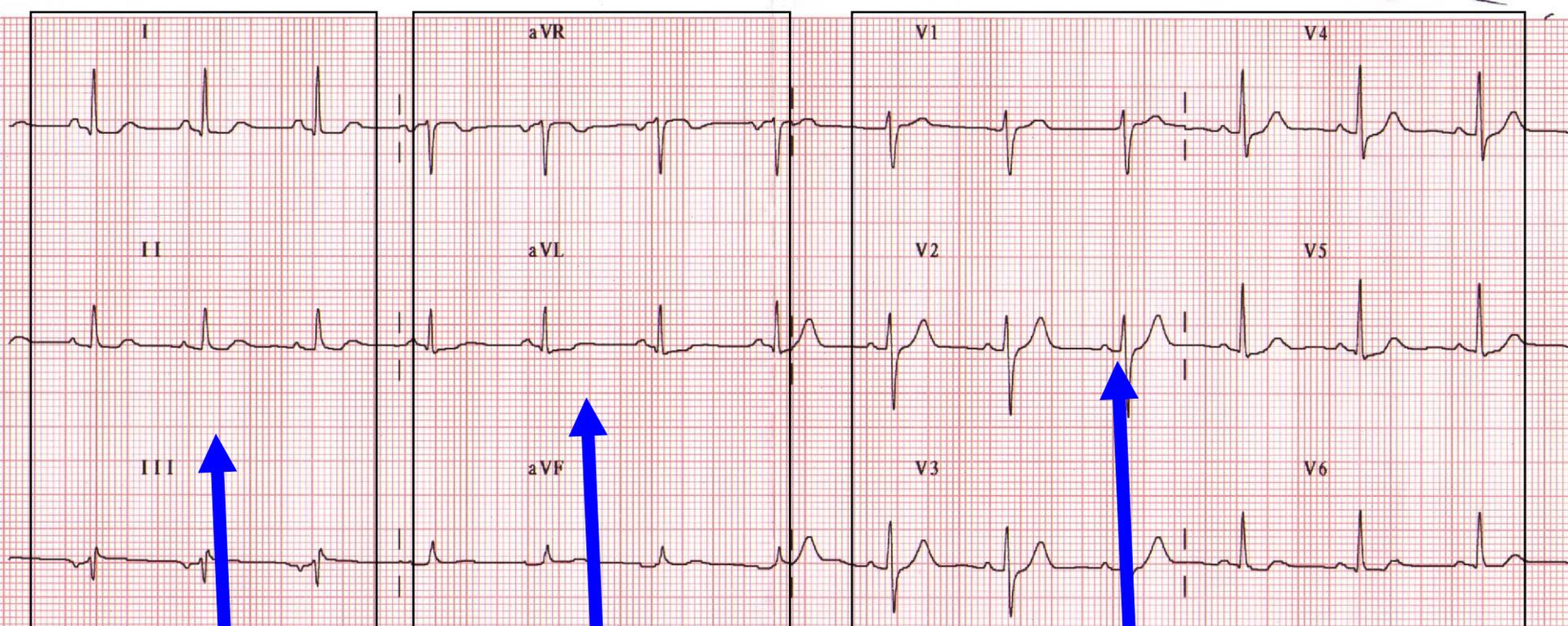


Voltaje más ALTO = Derivadas Precordiales
Voltaje INTERMEDIO = Derivadas Einthoven
Voltaje más BAJO = Derivadas Unipolares

Reglas de Voltaje
Voltaje DII = DI + DIII
Voltaje aVR + aVL + aVF = 0

Derivadas Precordiales
Voltaje OR y OS > 8 mm y <30 mm
Voltaje de OR + OS < 40 mm





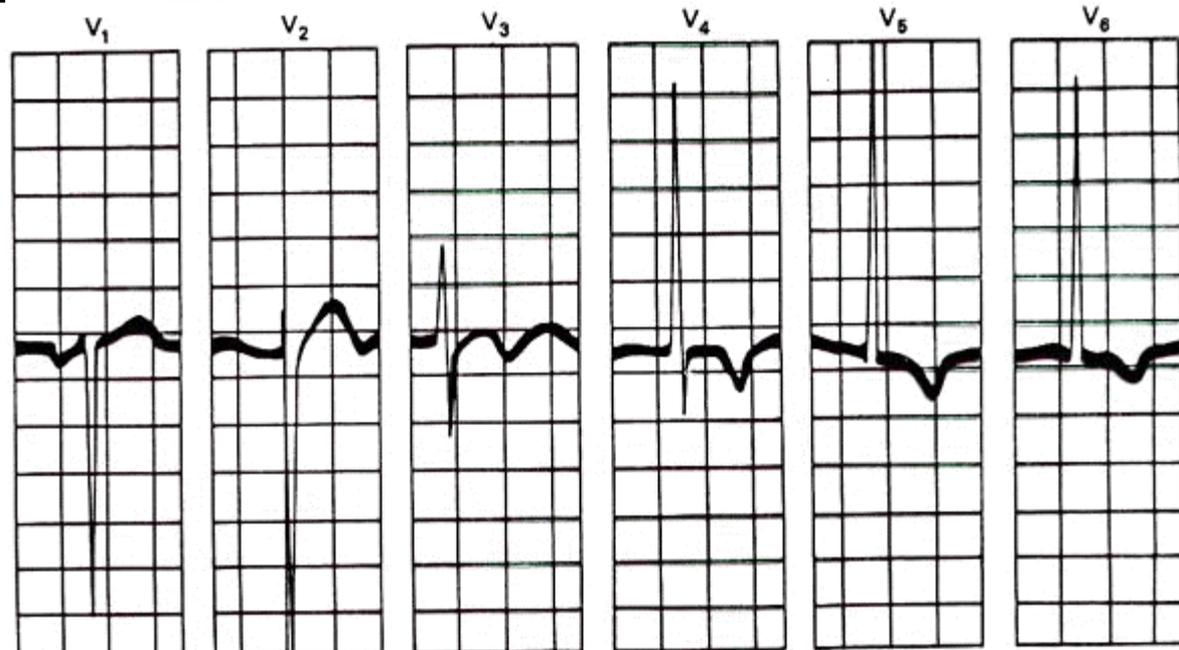
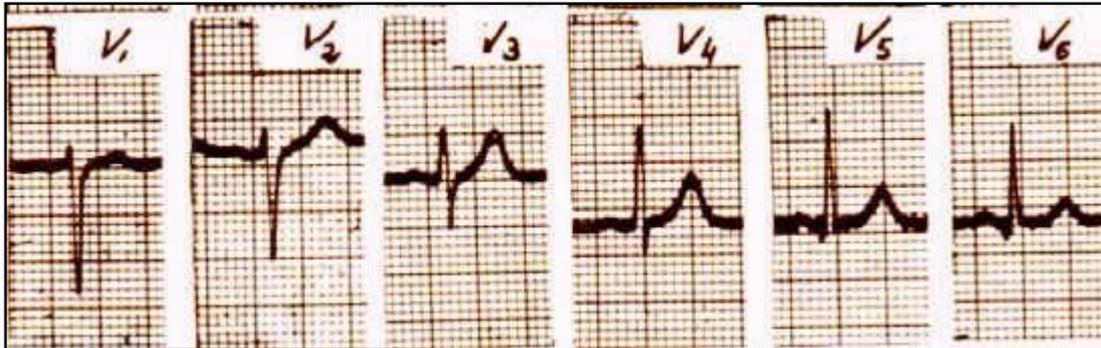
Voltaje más ALTO = Derivadas Precordiales
Voltaje más BAJO = Derivadas Unipolares
Voltaje INTERMEDIO = Derivadas Einthoven

Variables Estudiadas en el ECG

Ejemplo Patología

Amplitud Ondas

Derivadas Precordiales
Voltaje OR y OS > 8 mm y < 30 mm
Voltaje de OR + OS < 40 mm



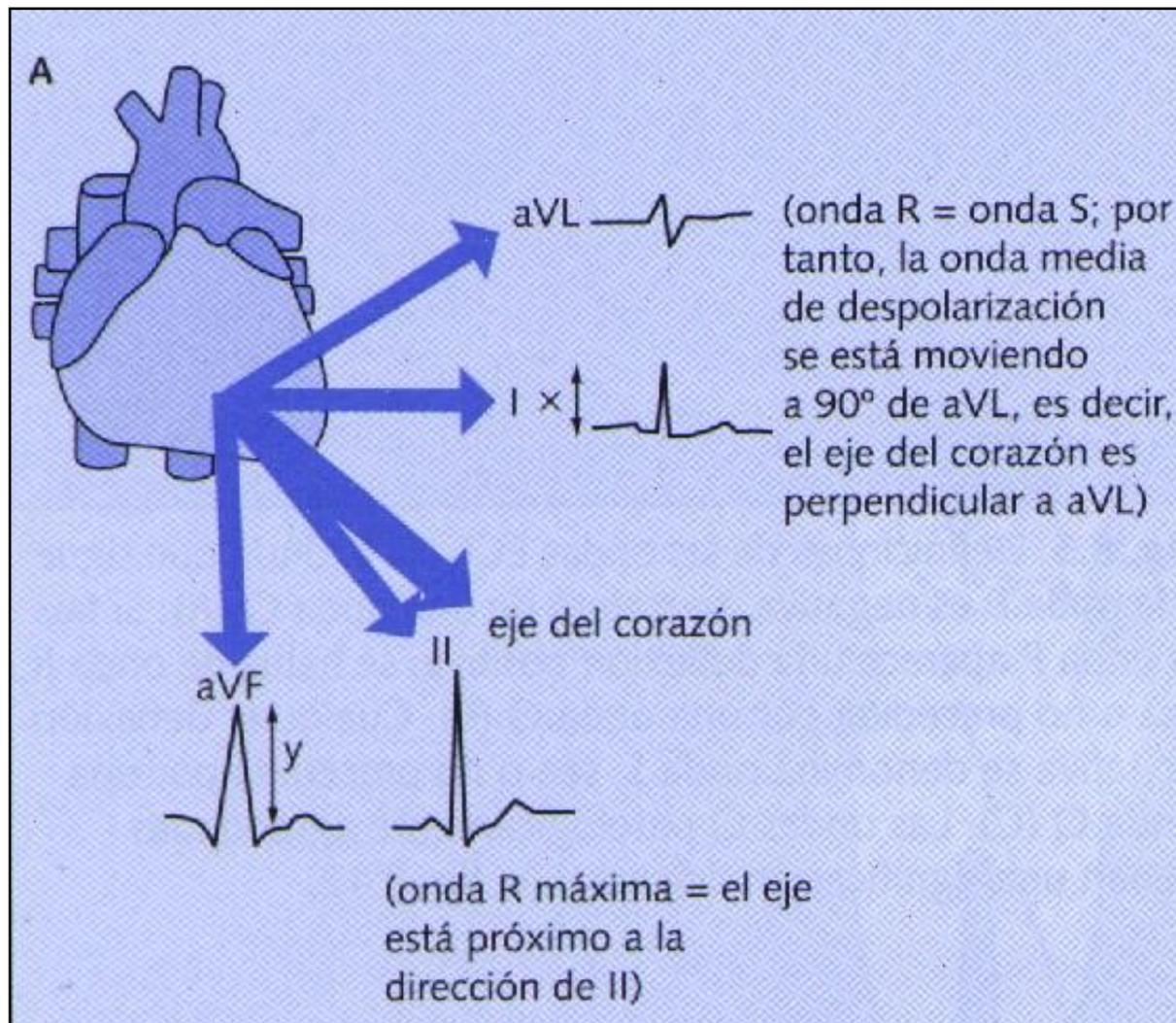
Variables Estudiadas en el ECG

Valores Normales

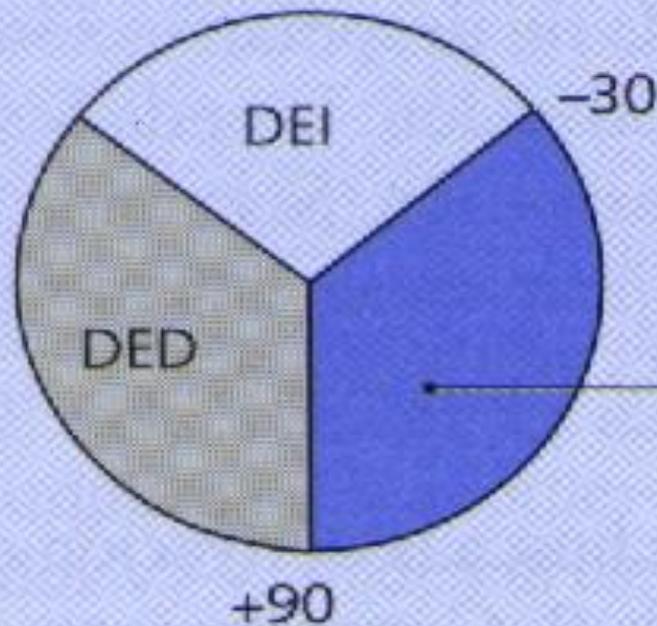
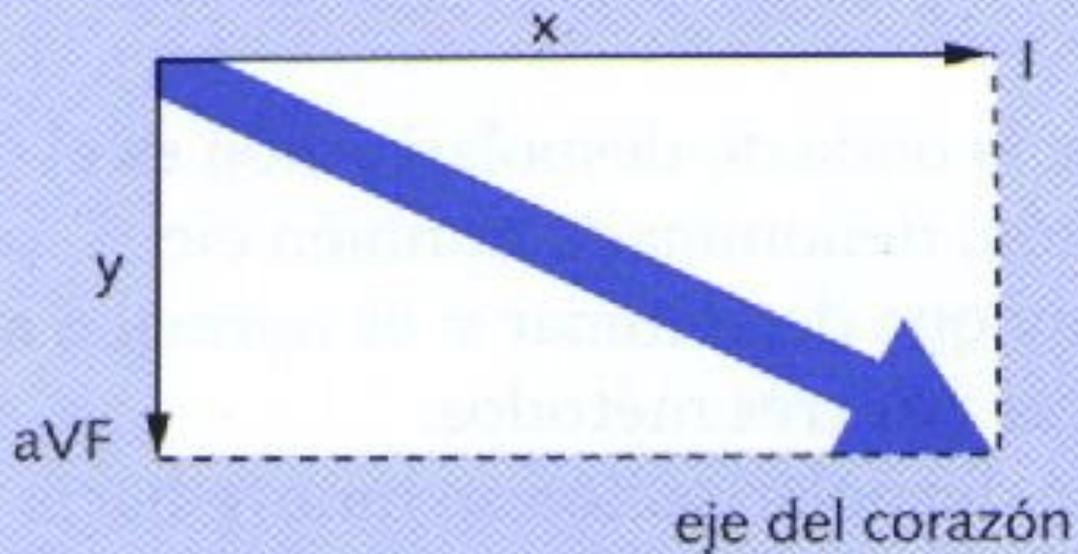
Eje Eléctrico

Complejo QRS

Eje QRS entre -30° y 90°



para calcular exactamente el eje utiliza I y aVF



si el eje está en este cuadrante, es normal

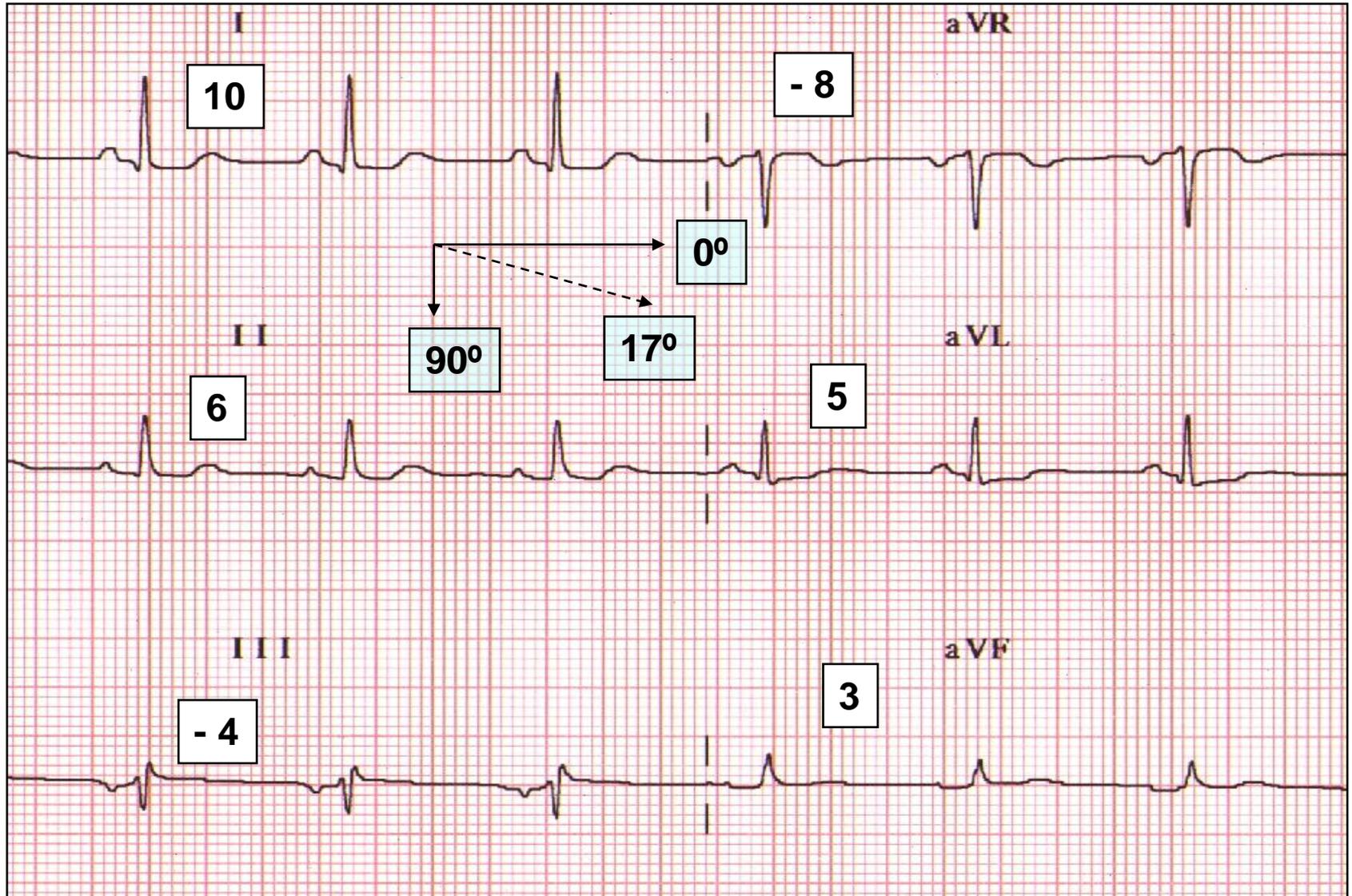
Variables Estudiadas en el ECG

Eje Eléctrico

Complejo QRS

Valores Normales

Eje QRS entre -30° y 90°



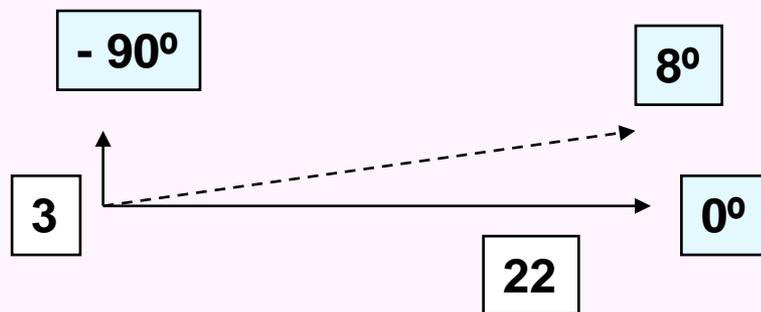
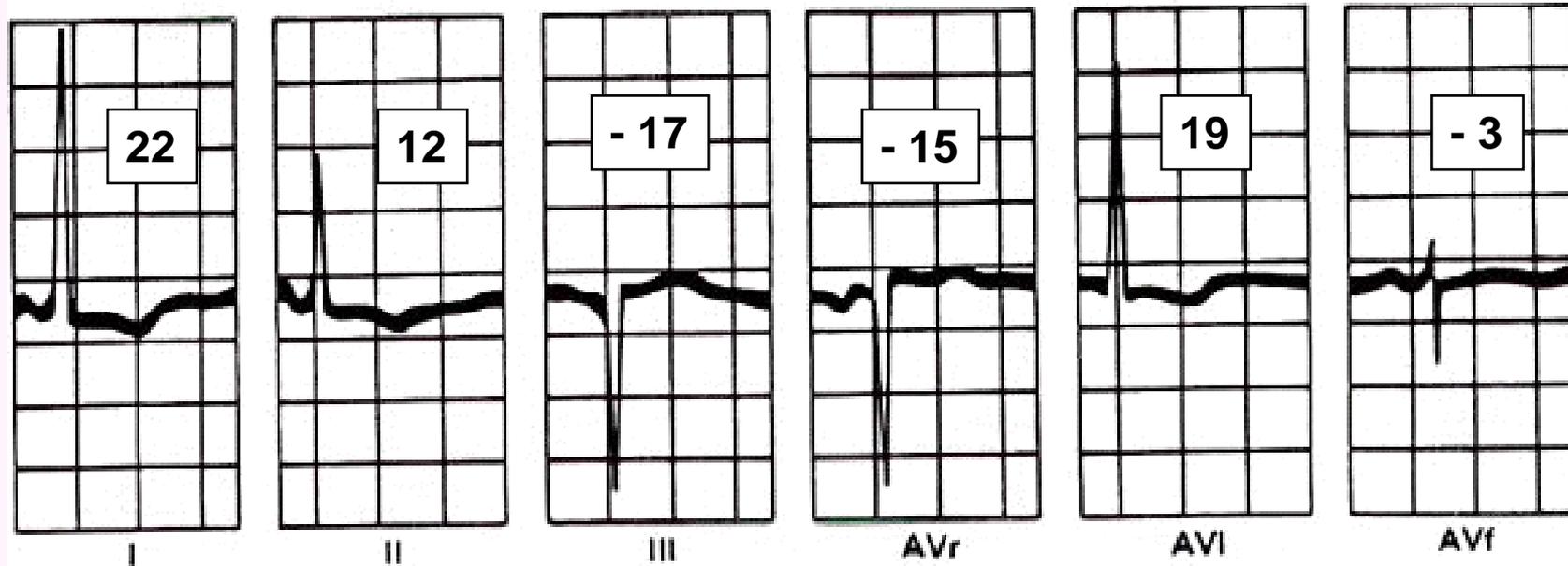
Variables Estudiadas en el ECG

Eje Eléctrico

Complejo QRS

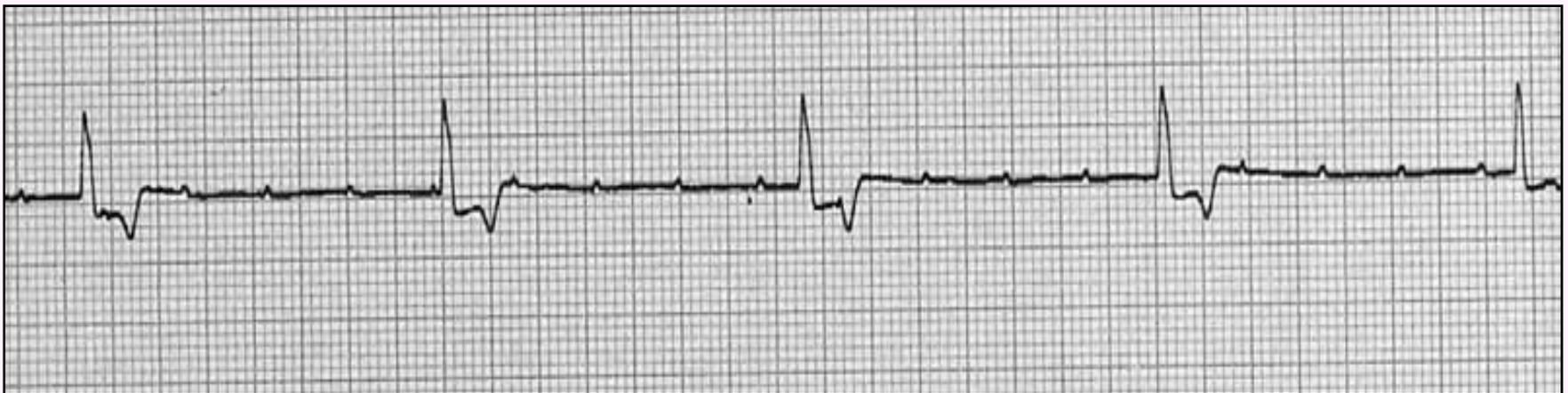
Valores Normales

Eje QRS entre -30° y 90°



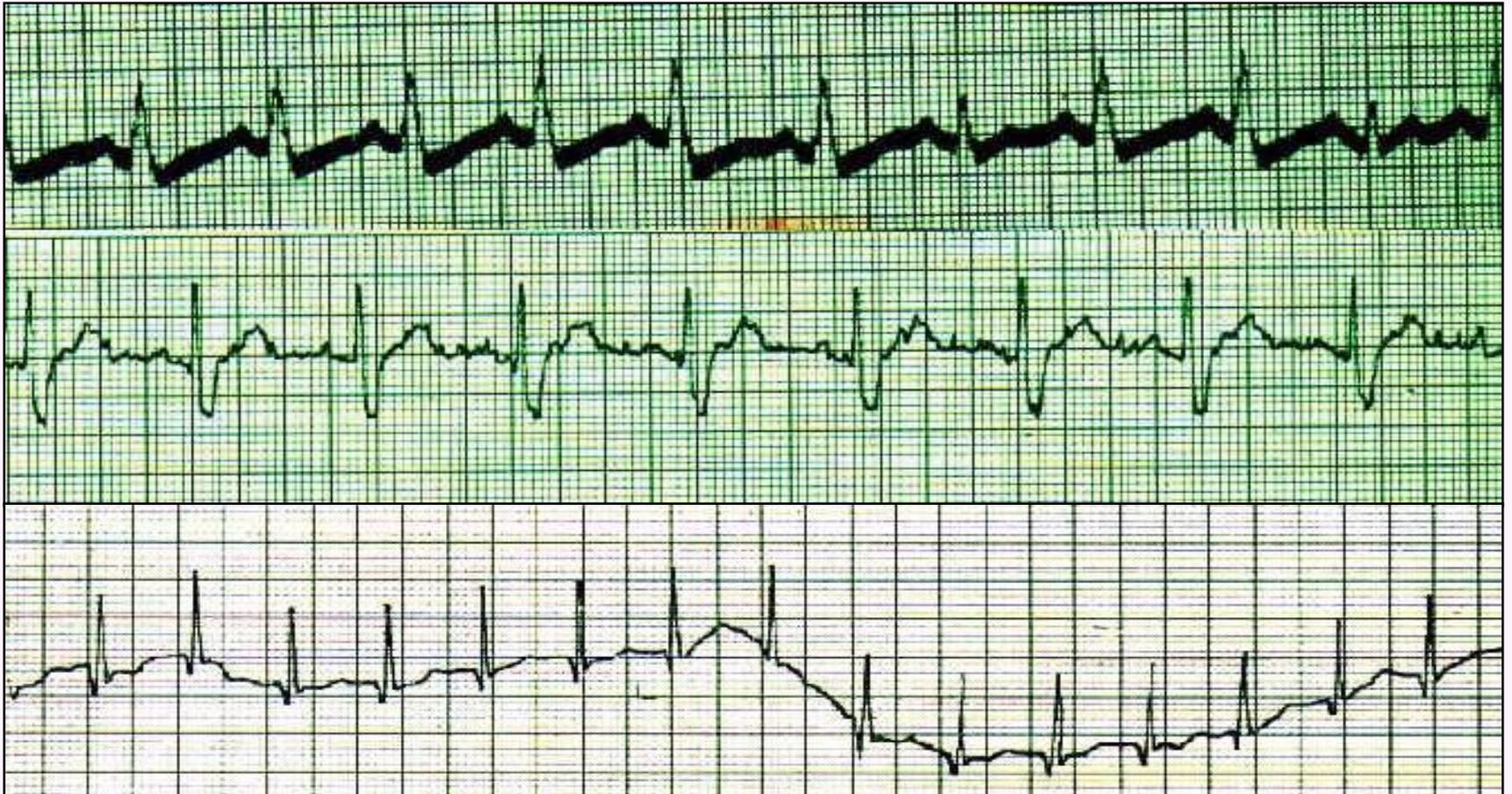
Variables Estudiadas en el ECG

Morfología de las Ondas



Variables Estudiadas en el ECG

Artefactos



Bibliografía en la WEB

<http://www10.uniovi.es/medvoice/u6.htm>

<http://www.svnp.es/Documen/ecg.htm>

http://www.e-mergencia.com/html/historia_ecg/

<http://es.geocities.com/simplex59/electrocardiograma.html>

http://www.medspain.com/curso_ekg/cursoekg_indice.htm

http://www.umm.edu/esp_ency/article/003868.htm

<http://www.viasalus.com/vs/B2C/cn/enciclopedia/ESP/ency/article/003868.jsp>

<http://www.estafilococo.com.ar/electrocardiol.htm>

http://www.geocities.com/estandar_ecg/

<http://webs.comb.es/aranda/eind.html>

<http://webs.comb.es/aranda/eind.html>

<http://sabanet.unisabana.edu.co/medicina/semestre3/fisiologia/ec299g.html>

<http://www.vet.ohio-state.edu/docs/vm600/ecglab/image01.html>