



# Electrocardiogram (ECG)

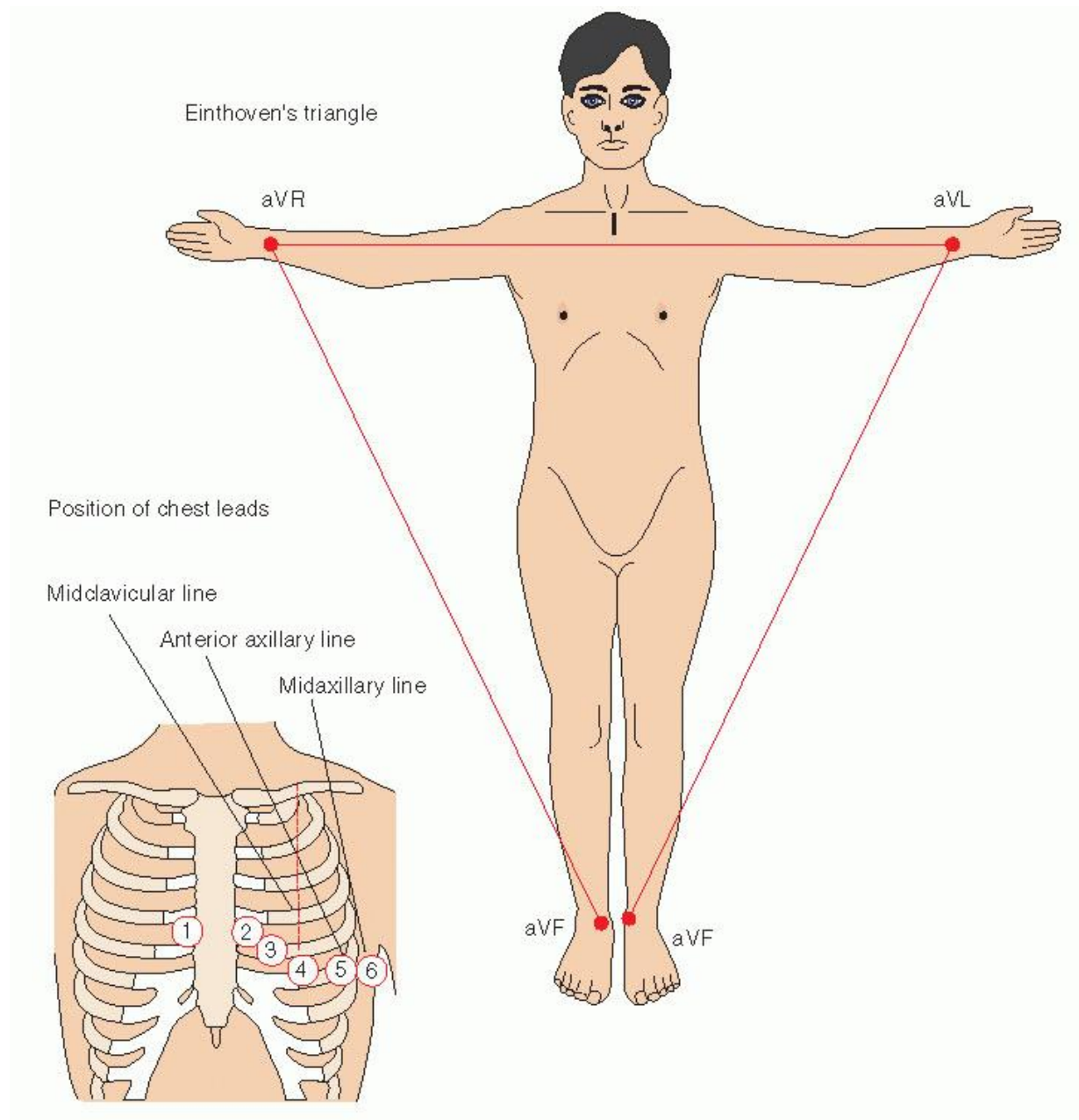
## Learning Objectives:

- To understand the most common indications for recording a 12-lead ECG.
- To understand the procedure for obtaining a 12-lead ECG as per the Royal Marsden Hospital Manual of Clinical Nursing Procedures (2011), in particular the correct placement of ECG leads.
- To be able to troubleshoot problems arising during the capture of a 12-lead ECG.
- To be able to recognise normal sinus rhythm and common or life-threatening abnormalities requiring urgent escalation within the clinical team.

# Indications

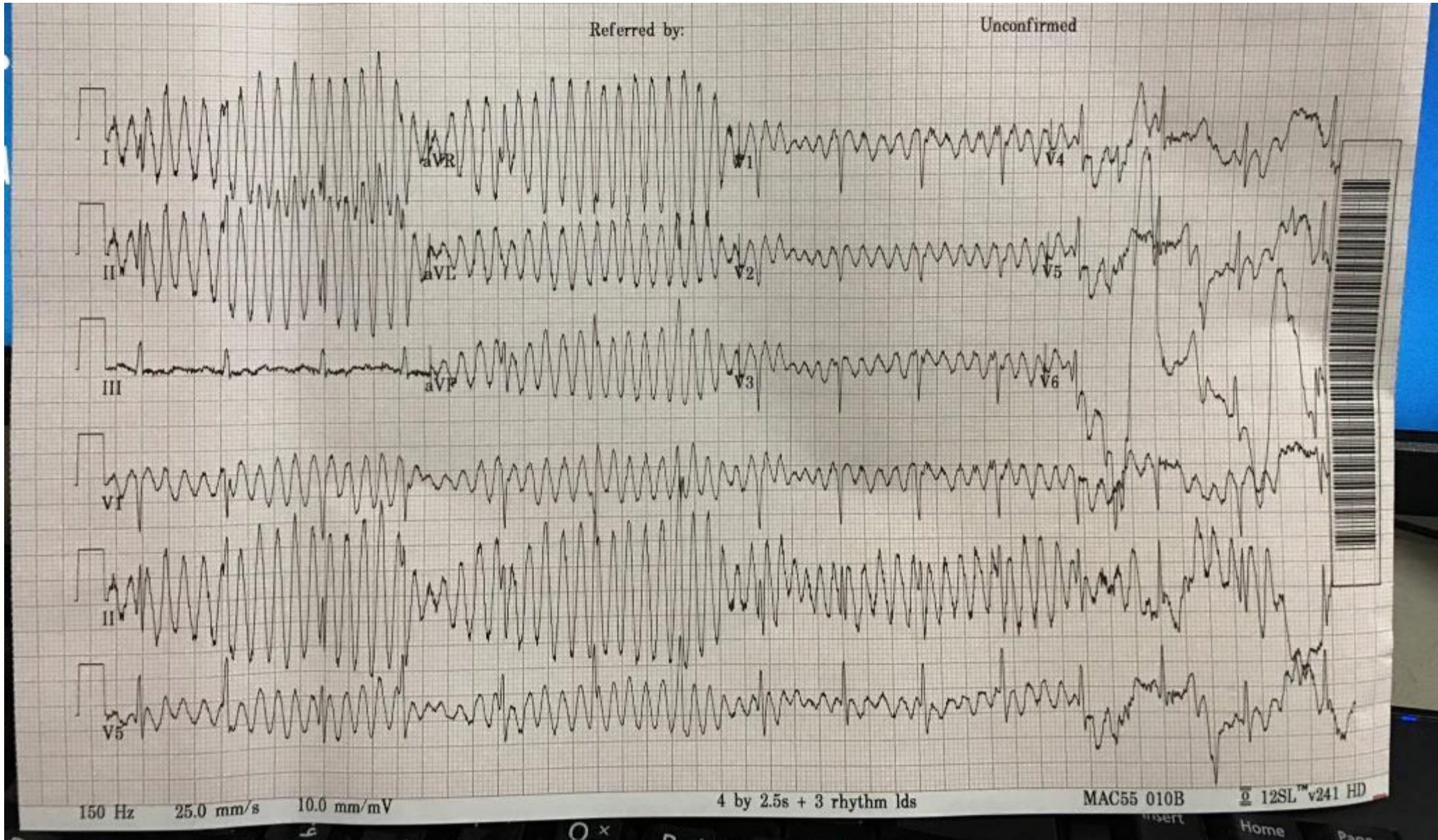
*What indications are there for recording an ECG?*

# Lead Placement

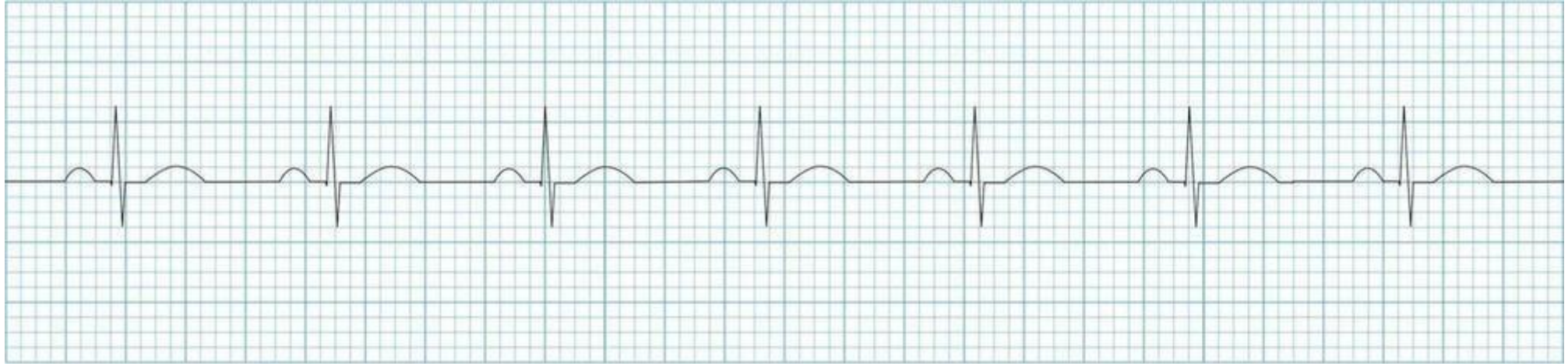


Redrawn from Metcalf (2000) with permission, in Dougherty, L. & Lister, S. (eds.), 2011

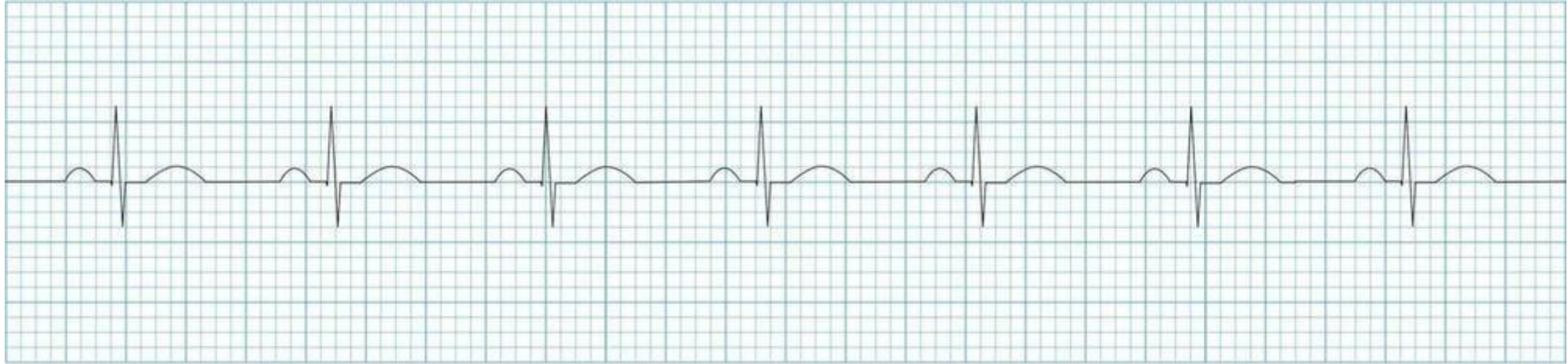
# Artefact



# Rhythm Strips



# Rhythm Strips



Normal Sinus Rhythm

# Rhythm Strips



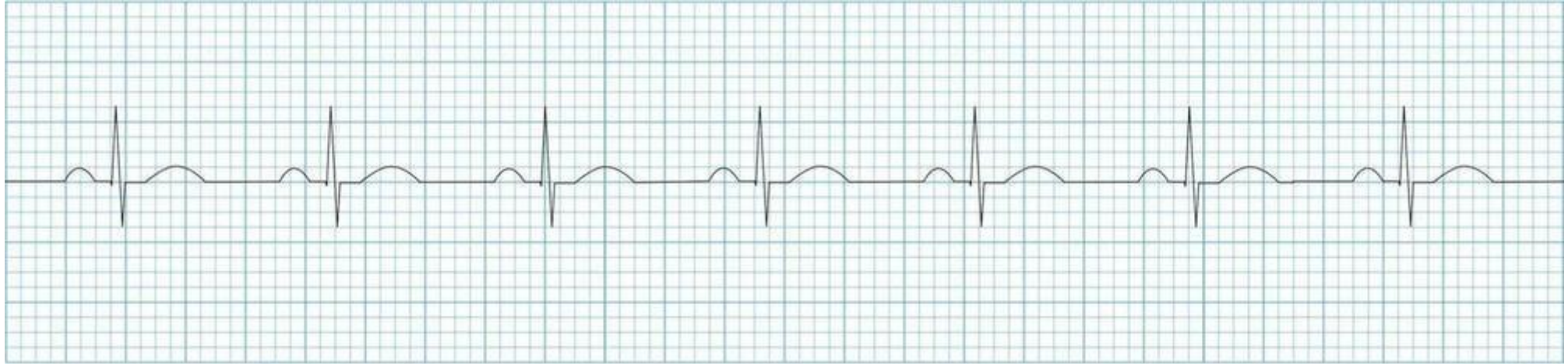


# Rhythm Strips

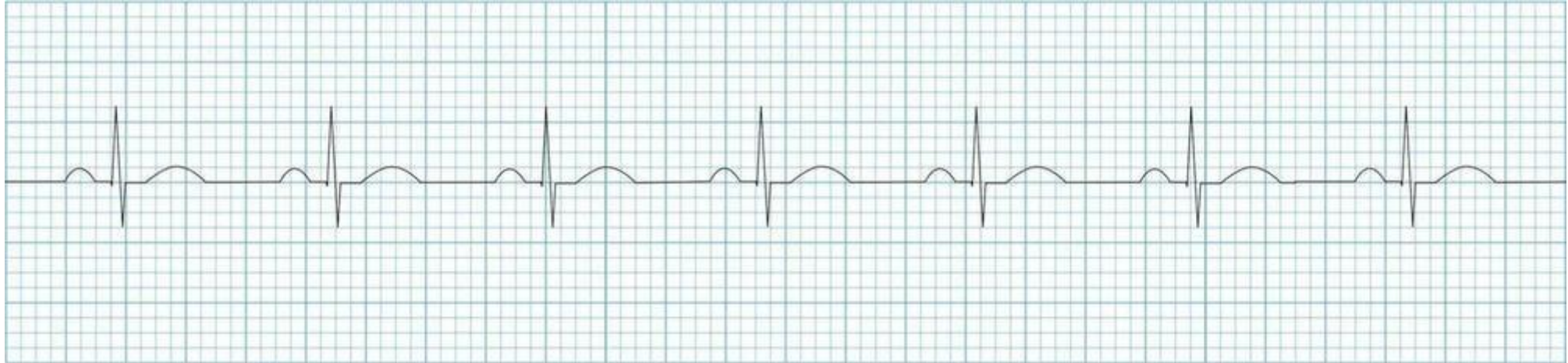


**Atrial Fibrillation**

# Rhythm Strips



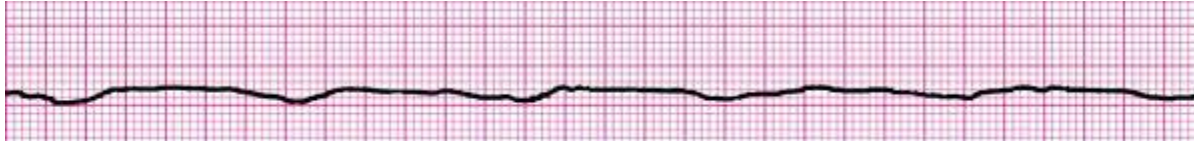
# Cardiac Arrest Rhythms



Pulseless Electrical Activity (PEA)

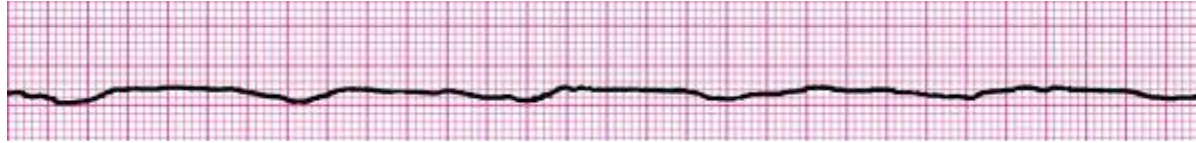
Source: <http://www.litfl.com>

# Cardiac Arrest Rhythms



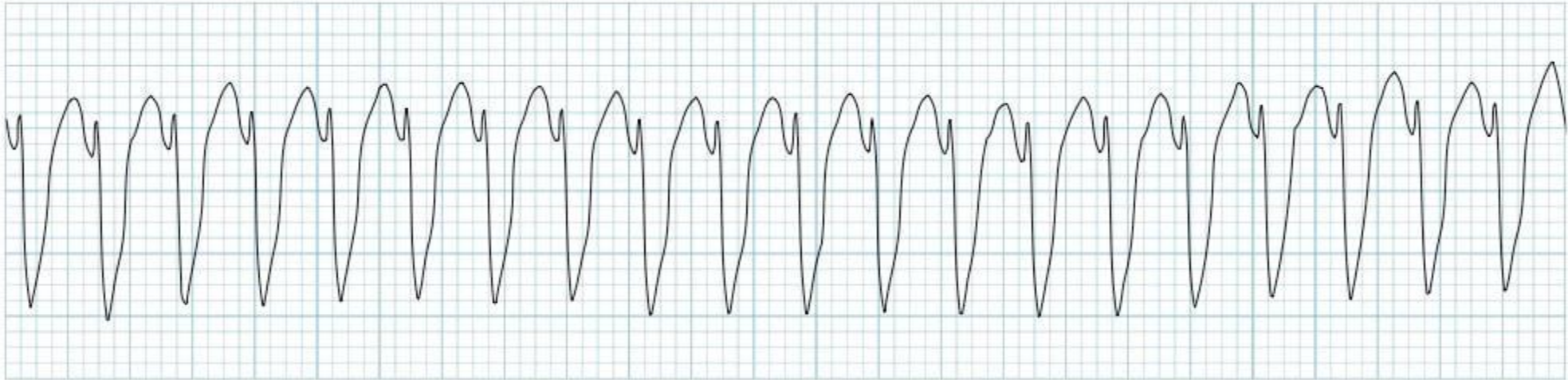
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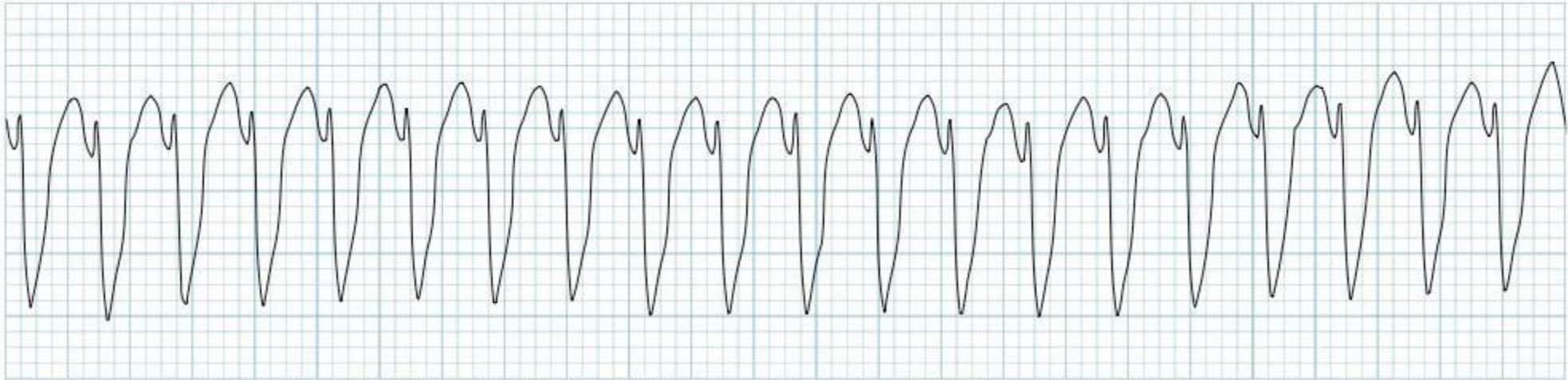
# Cardiac Arrest Rhythms



Asystole

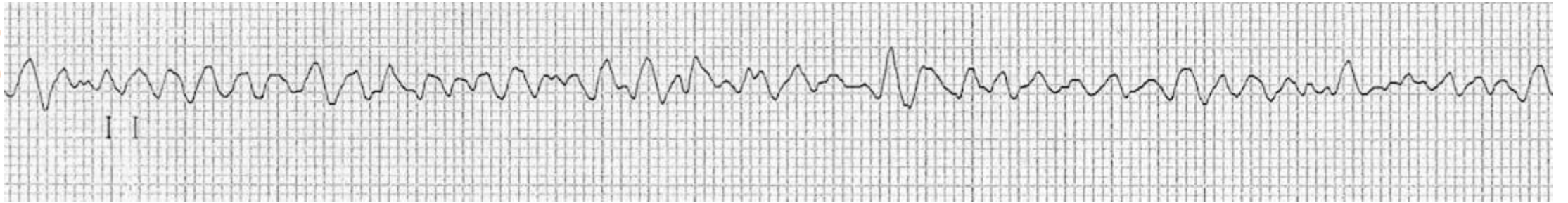
# Cardiac Arrest Rhythms



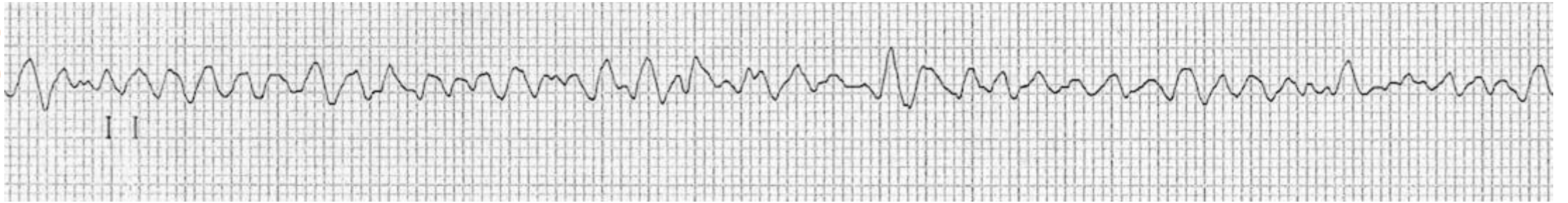


Ventricular Tachycardia

# Cardiac Arrest Rhythms







## Ventricular Fibrillation



University of  
**Salford**  
MANCHESTER

Any Questions?