

SYNCOPE



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2013

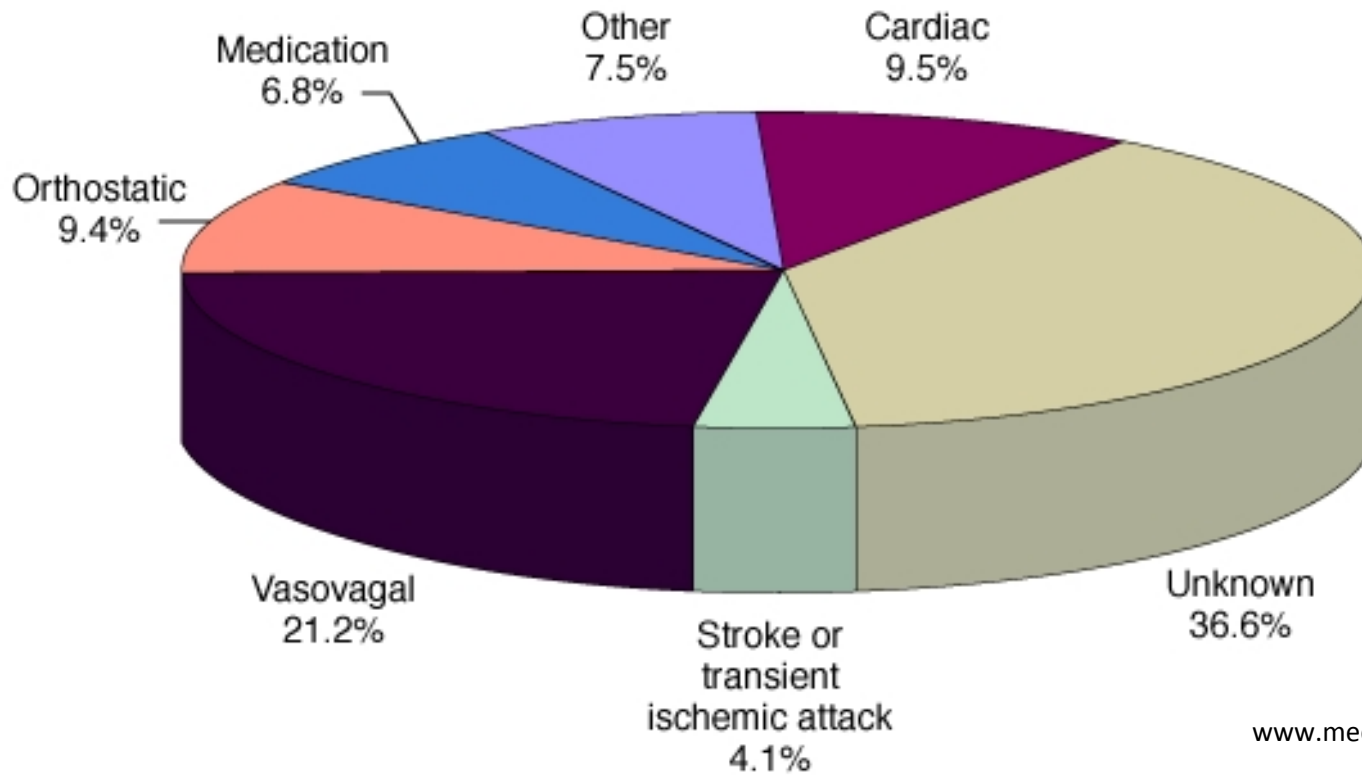
Syncope

- Definition
- Causes
- Aim of the Evaluation
- Differentiating Syncope v Seizure
- High Risk v Low Risk Patients
- Syncope “Rules”
- **Role of the ECG**

Syncope

- **Brief** loss of consciousness
- inability to maintain **postural tone**
- **spontaneously** and **completely** resolves without medical intervention

Syncope



Syncope

- **Pearl #1 - Rule of 15%.**

All of these will present with syncope **15%**
of the time:

SAH, ACS, AoD, PE, AAA, EP

Syncope

- **Goals of Evaluations**
 - who needs **admitting**
 - who can go **home** and not die
 - who has **reversible** and **deadly** causes

Syncope

- **Pearl #2.**

Pre-syncope requires the same **workup** as syncope



Syncope

- **Syncope v Seizure**

Syncope

Nausea or diaphoresis
Orientated on waking
Age > 45
Prolonged sitting/standing
Hx CHF/CAD

Seizure

Hx of seizure disorder
Tongue biting, confusion
Age < 45
LOC > 5 min
Preceding aura
posturing / jerking / etc
Post ictal

Syncope

- **High Risk patients** (common sense)
 - Older age, CAD, SHD (valvular, LVH),
 - Exertional syncope
 - Murmurs
 - ACS
 - FHx of sudden cardiac death

Syncope

- “Rules”

- San Francisco Syncope Rule

- Boston Syncope Rule

- *Grossman J J Emerg Med. 2007 Oct;33(3):233-9. Epub 2007 Jul 5*

- Short-Term Prognosis of Syncope Rule

- *Costantino J Am Coll Cardiol. 2008 Jan 22;51(3):276-83.*

Syncope

- **San Francisco Syncope Rule**
 - **C** CHF
 - **H** Hct < 30 %
 - **E** ECG abn
 - **S** SOB
 - **S** SBP < 90 on triage

Syncope

- Pearl #3 -

CHESS ± Exertional ± FHx SCD

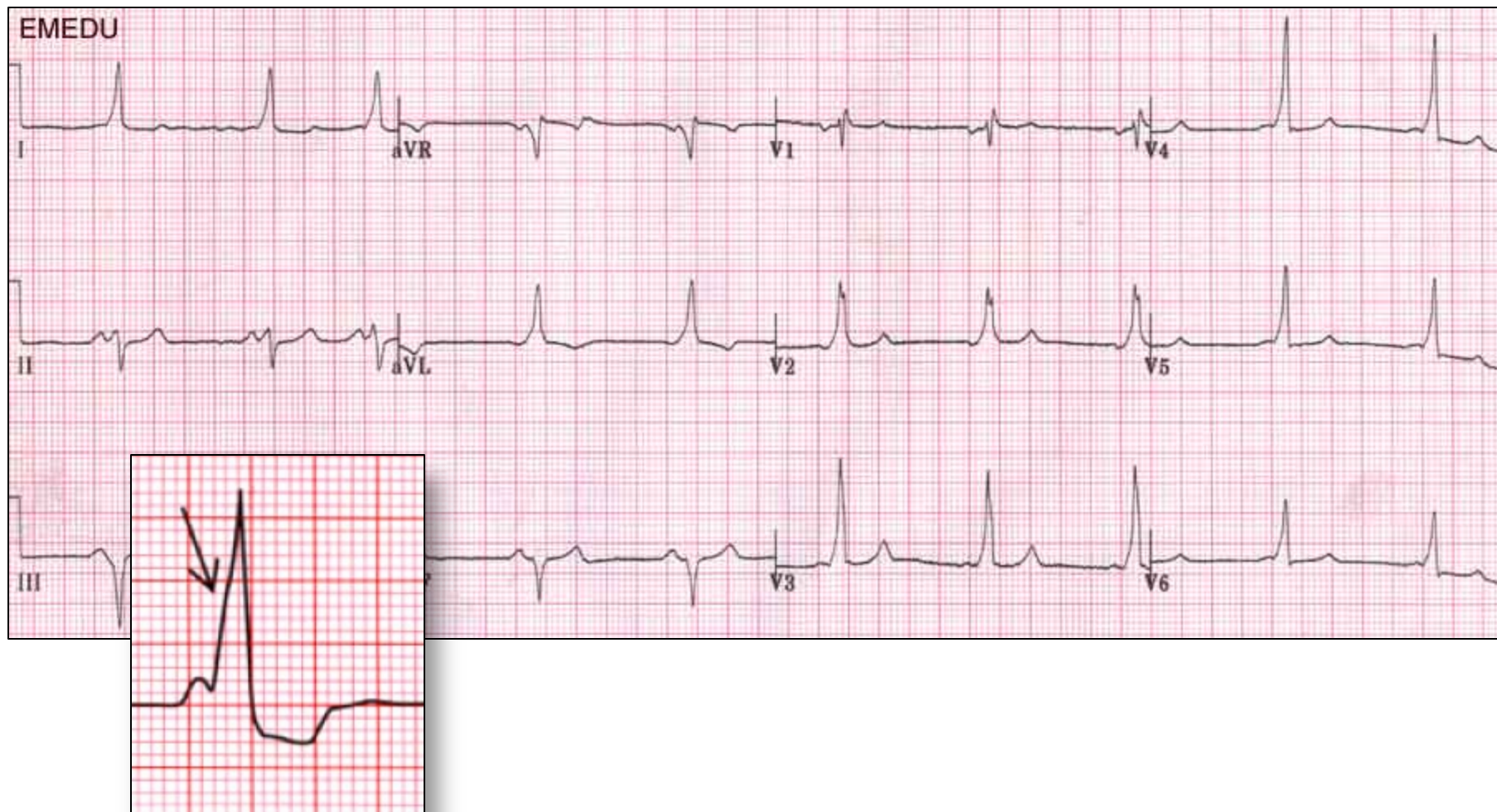
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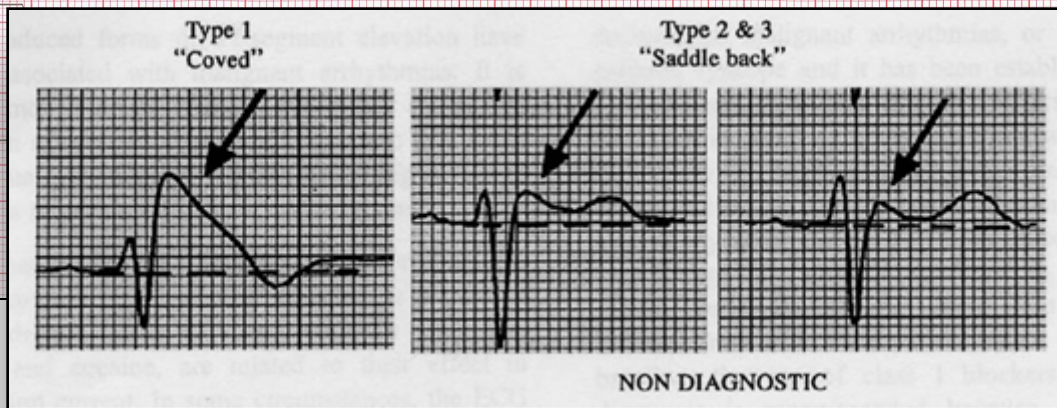
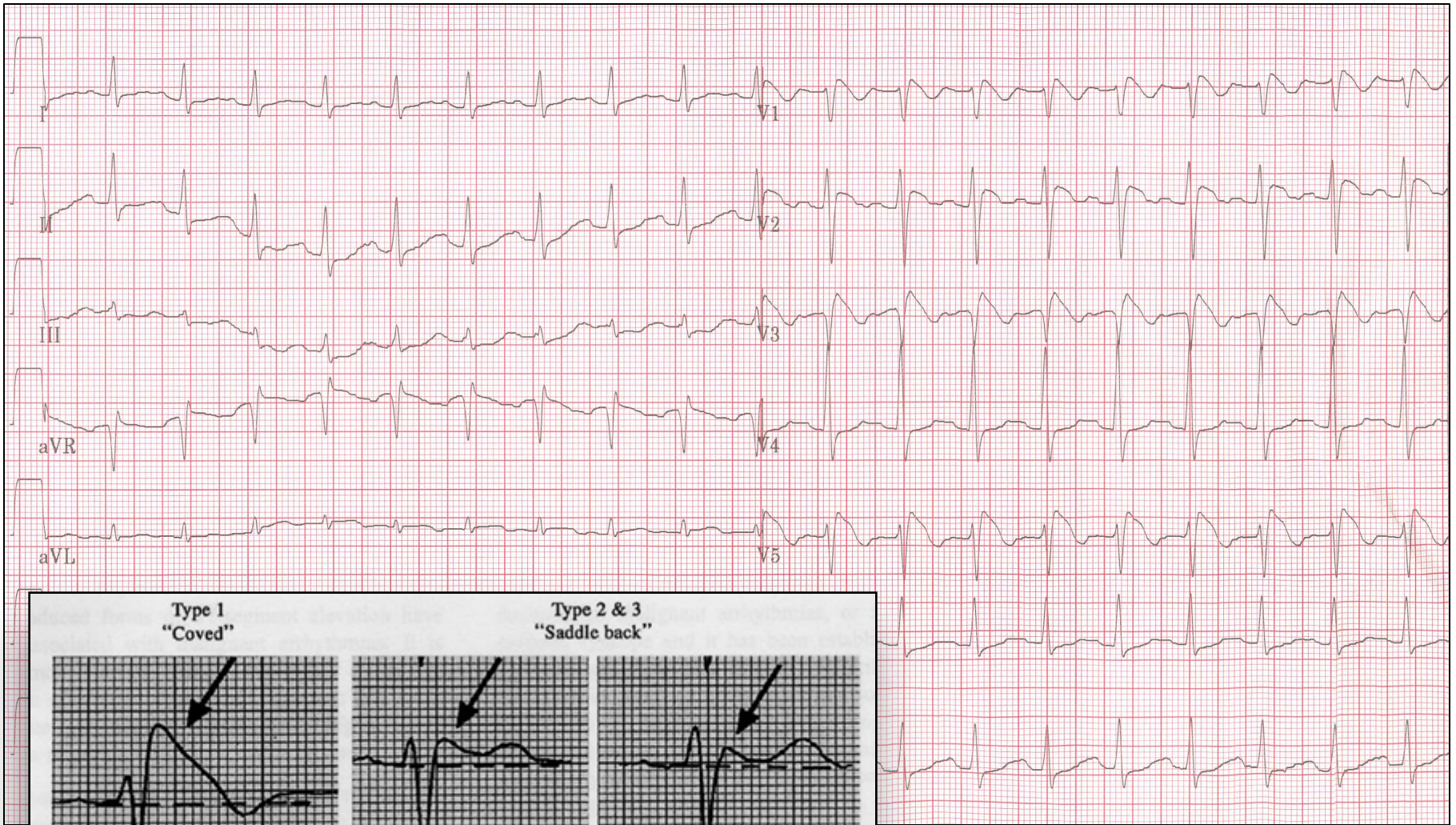
Syncope

- ECG Abnormalities (**The killer 5**)
 - WPW
 - **Brugada Syndrome**
 - HOCM
 - Prolonged QTc
 - ARVD

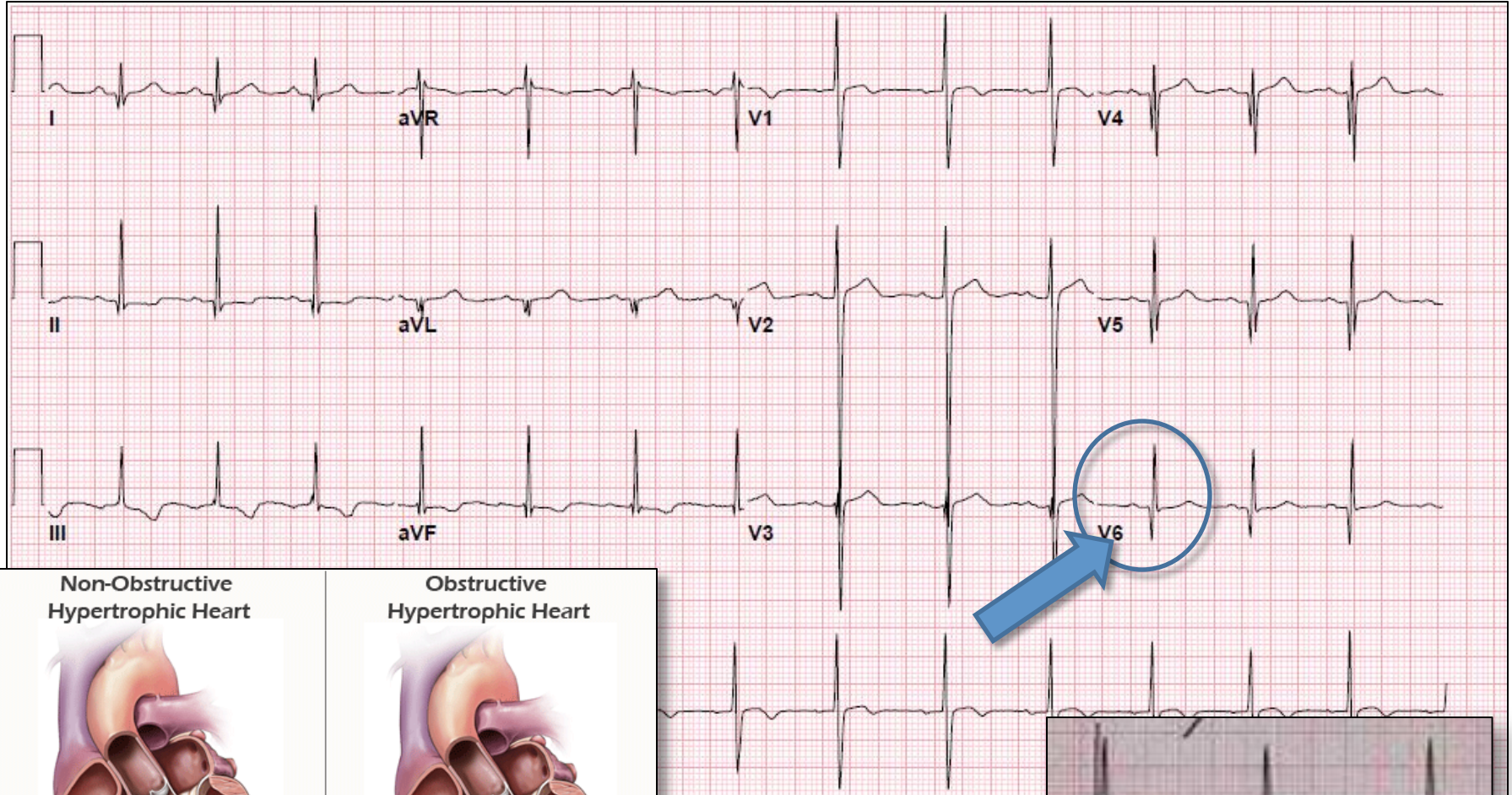
WPW



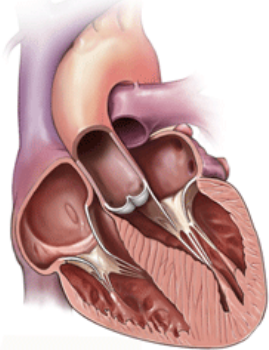
Brugada Syndrome



Hypertrophic Obstructive Cardiomyopathy

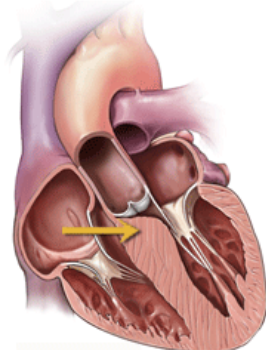


Non-Obstructive Hypertrophic Heart

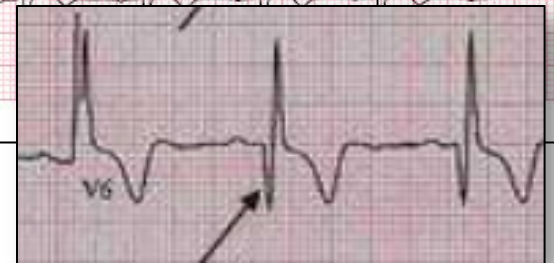


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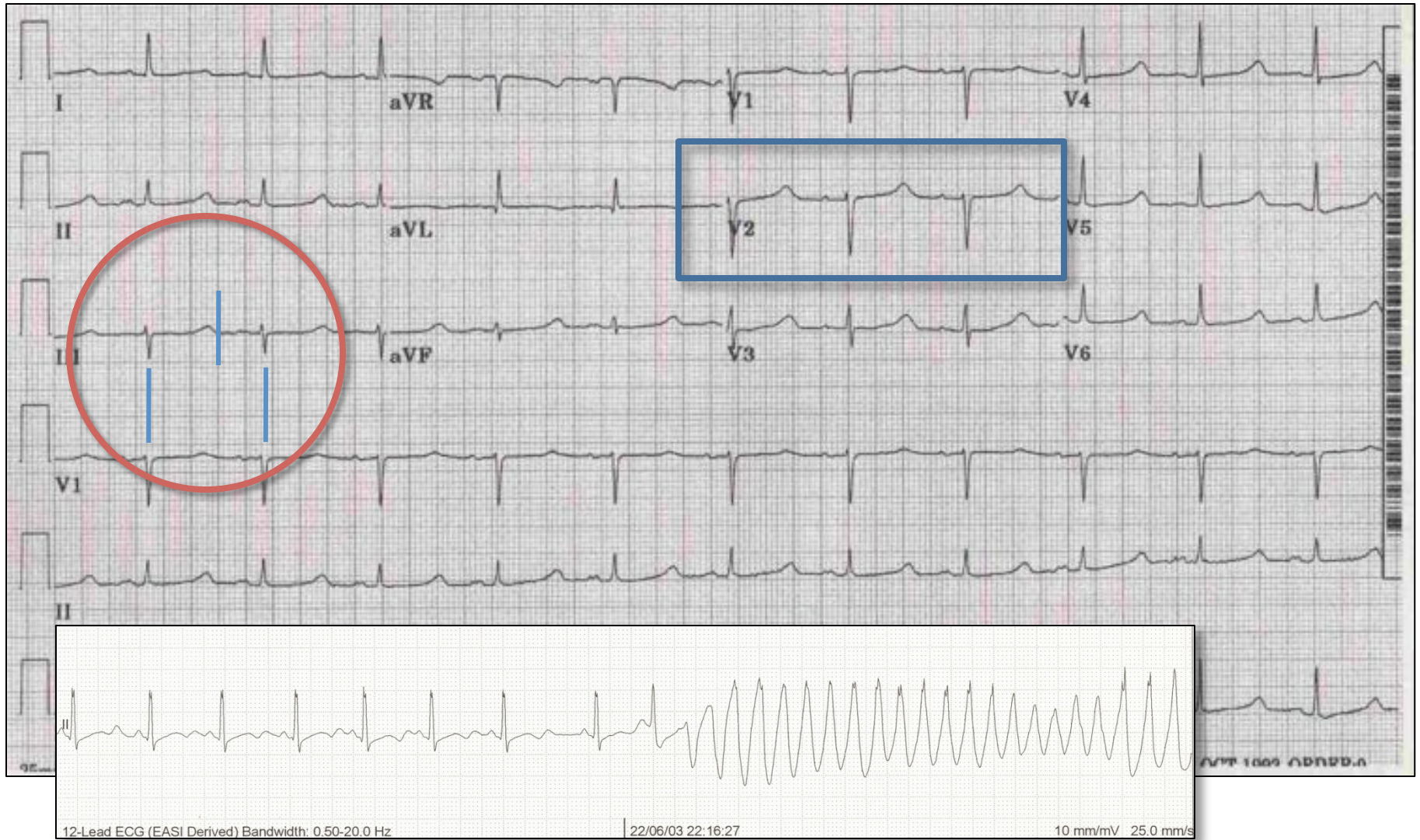
Obstructive Hypertrophic Heart



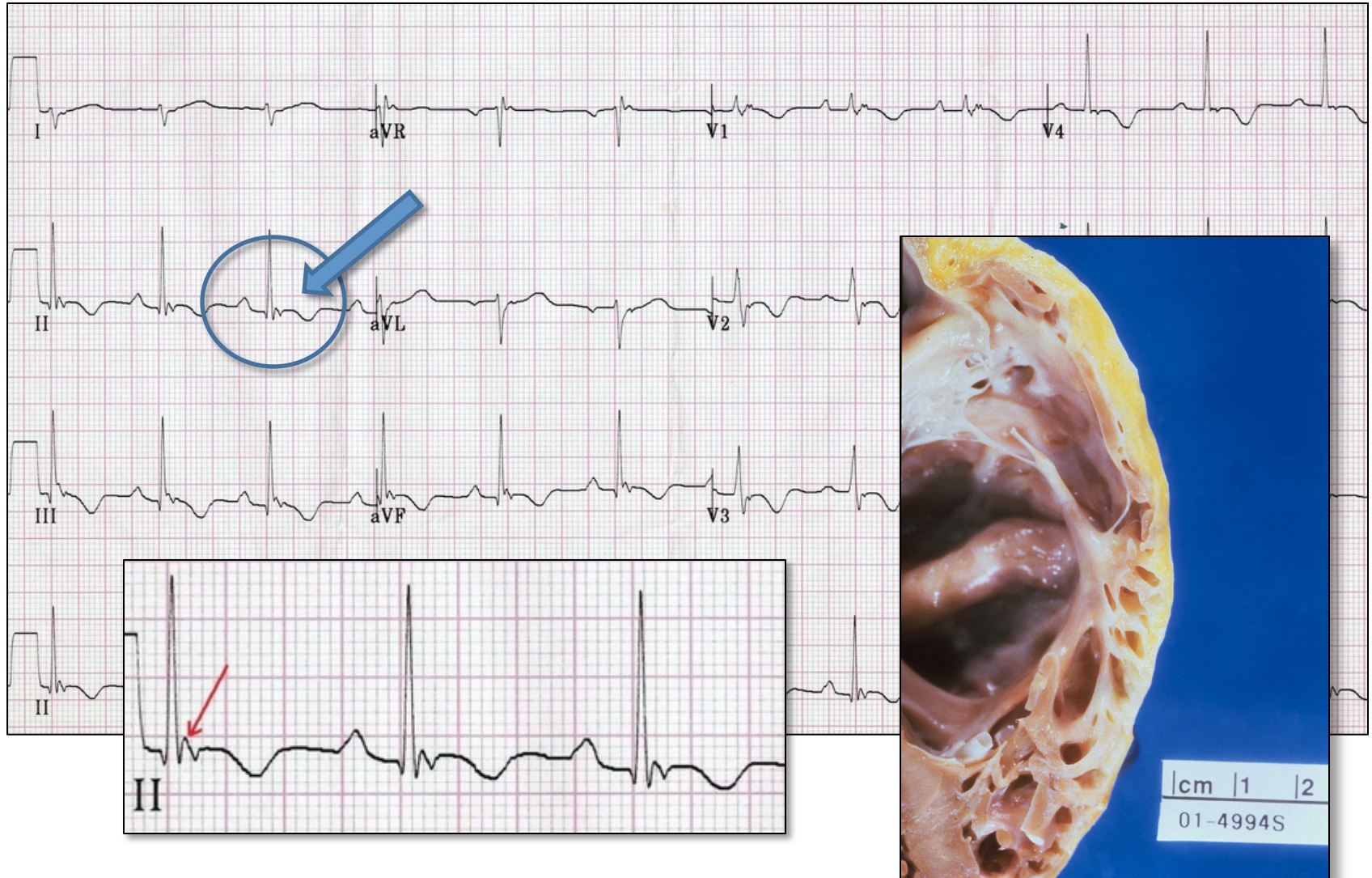
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Prolonged QTc Syndrome



Arrhythmogenic Right Ventricular Dysplasia - ARVD



Syncope

Summary

- History and physical important
- Pre-syncope is the same as syncope
- Always do an ECG and look
- Rule of 15%
- Identify high Risk patients
 - CHESS / Exertional / FHx SCD