

Approach to a patient with Palpitations

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Why is this important ?

- Palpitations are estimated to account for 16% of GP presentations and the second most common cause of presentation to Cardiologists¹
- Whilst the majority are benign ; the diagnosis is important and rarely can be associated with serious adverse events .

1. Raviele A, Giada F, Bergfeldt L, et al. Management of patients with palpitations: A position paper from the European Heart Rhythm Association. *Europace* 2011;13(7):920–34. doi: 10.1093/europace/eur130.

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How would you assess this patient ?

- 46/F comes to you complaining about palpitations.
- What are the questions you would ask her ?
- Onset of palpitations / duration of palpitations / associated symptoms/ how did it start / how did it end ?
- One of the big questions (at primary health level) – Is this organic? Is this serious ? Is it cardiac ?

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Primary Cardiac Causes

Primary
non cardiac

No cause
identified

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Questions/ Answers targeted at primary cardiac causes

- Starts suddenly ; then my HR is off to 180 or 200 and then stops suddenly or with “ a maneuver consistent with Valsalva” = suggestive of SVT
- It is associated with severe angina and I felt it coming on before I passed out = suggestive of VT (rare to present as palpitations)
- “It feels like my heart is skipping a beat and then I feel like it is slowing down “ – Ectopics.
- Was irregular , sometimes fast sometimes slow ; lasted for hours = likely AF

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Open ended Qs versus directed Qs

- Have you been having headaches / visual disturbances ? What have your home BP readings been like ? (relevant if Pheochromocytoma – rare)
- Is there a family history of endocrine problems ? (as above)
- Have you had a stroke in the past ?(PAF)
- Have you ever been given adenosine in the ED before ? (SVT)

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Open ended Qs versus directed Qs

- Have you had this since childhood ? (more likely Bypass tract mediated) ?
- Any history of congenital heart disease ?
- Is there anyone else in the family with this problem ?
- Any history of SCD in the family ?
- Any history of seizures / epilepsy / drowning events /single MVA (All the above are important for inherited arrhythmias eg Long QT).

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Completion of history

- ? IHD / Risk factors for IHD
- History directed towards presence or absence of structural heart disease .
- History suggestive of heart failure.
- Relationship to exercise / role of sport in lifestyle ? Endurance sport related rhythm problems.
- Use of stimulants / weight loss medications ?

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Role of mental health contributors

- It is important to be careful with the labelling of palpitations as being related to mental health / stress as eventually 54 % of these patients will be identified as having an arrhythmia ; the time delay is of the order of 3.4 years¹
- Sinus tachycardia could a clue to an underlying physical disorder or be a manifestation of anxiety ; therefore important to elucidate cause and effect

1.Lessmeier TJ, Gamperling D, Johnson-Liddon V,et al. Unrecognized paroxysmal supraventricular tachycardia. Potential for misdiagnosis as panic disorder. Arch Intern Med 1997;157(5):537–43.

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Examination

Is there any evidence of structural heart disease including congenital heart disease ?

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Examination

- Signs of thyrotoxicosis
 - Hypertension
 - Signs of anaemia
- Fluid status /hypovolemia
 - Postural hypotension

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Investigations

ECG



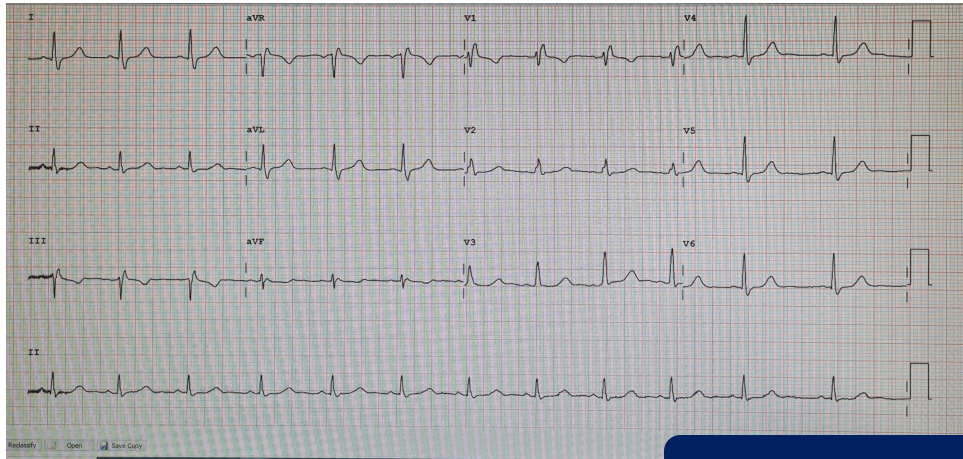
Holter



ECHO

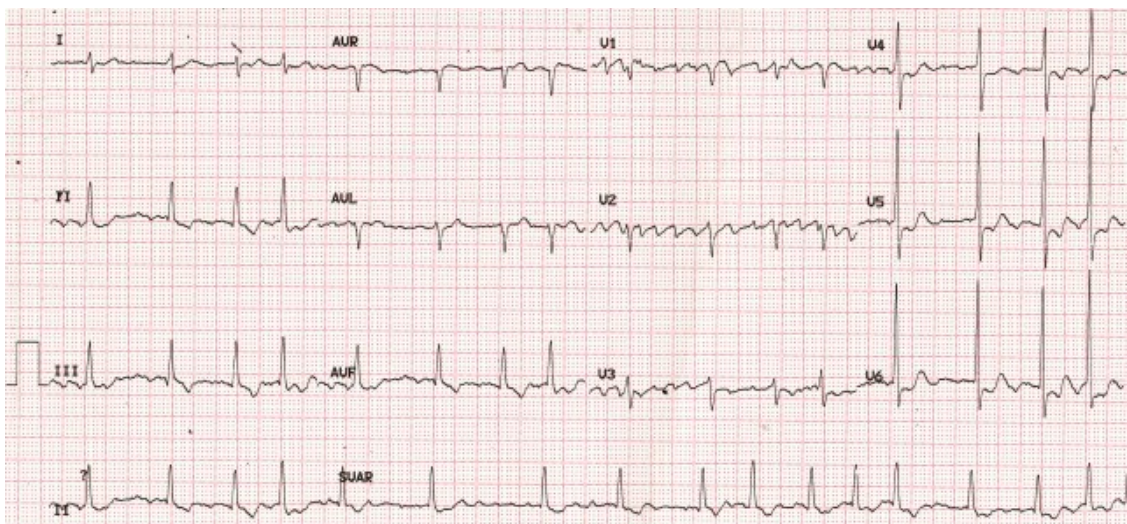


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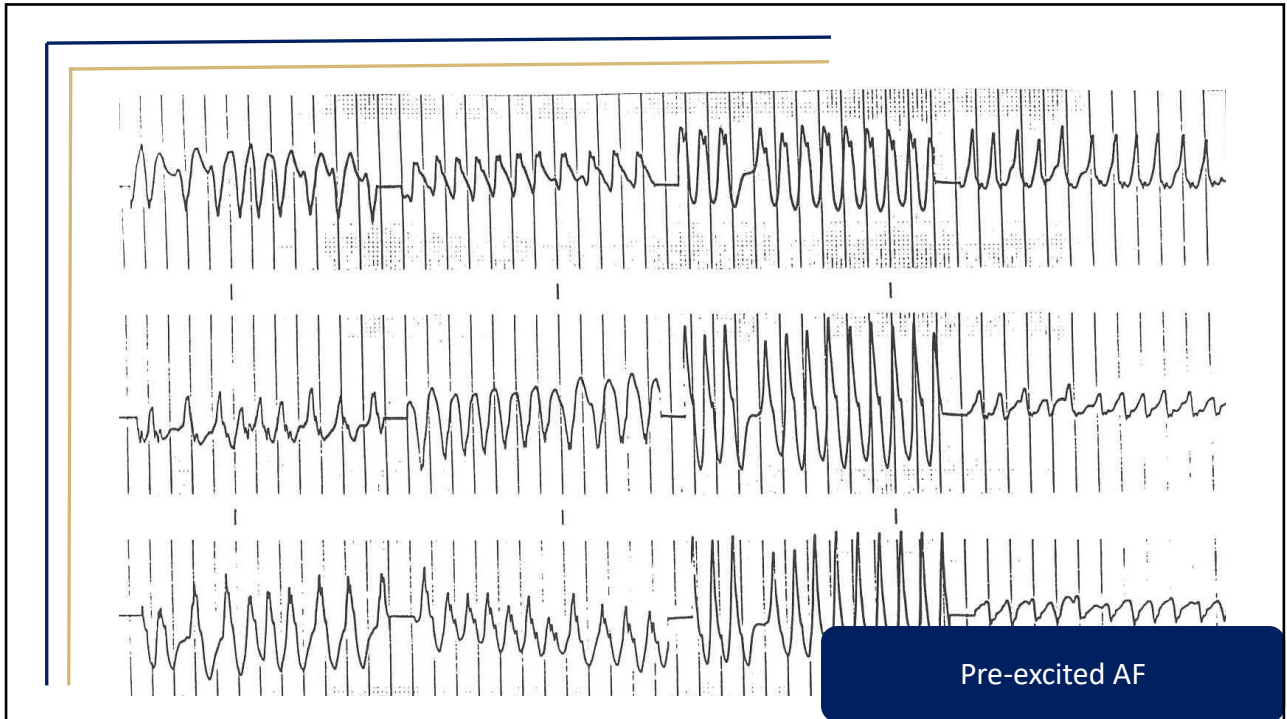
SR - RBBB

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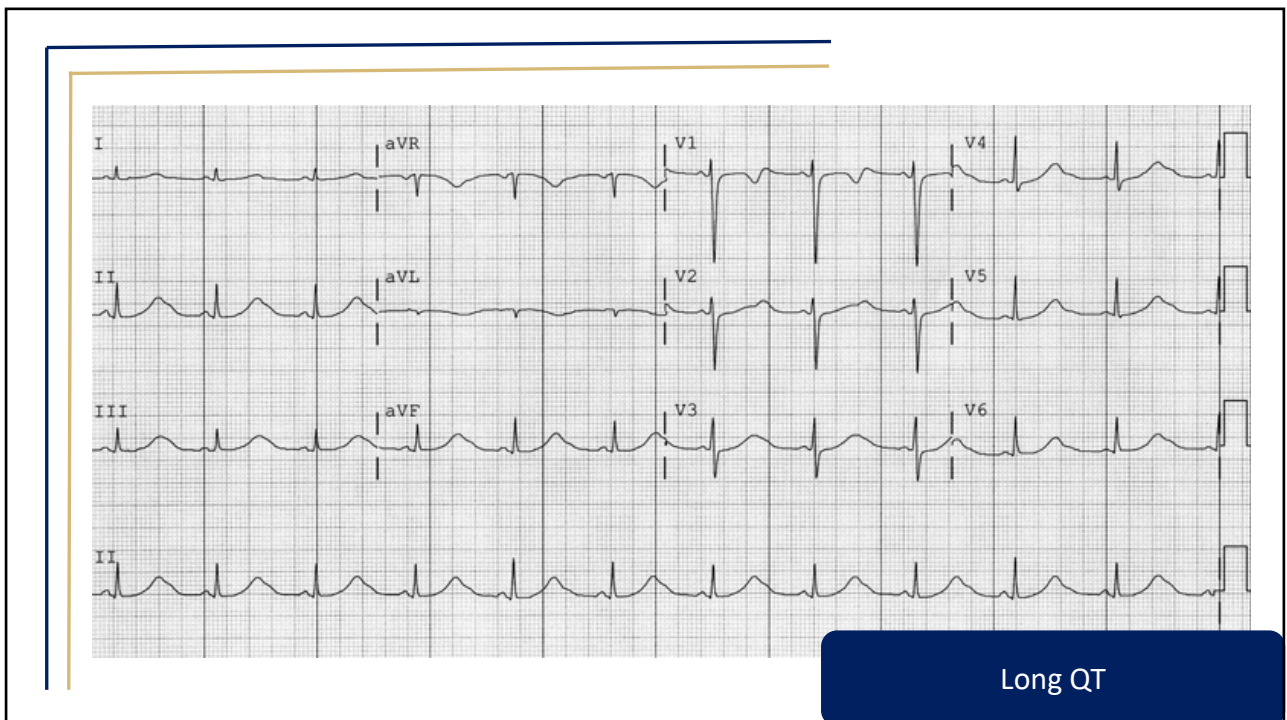


Atrial fibrillation

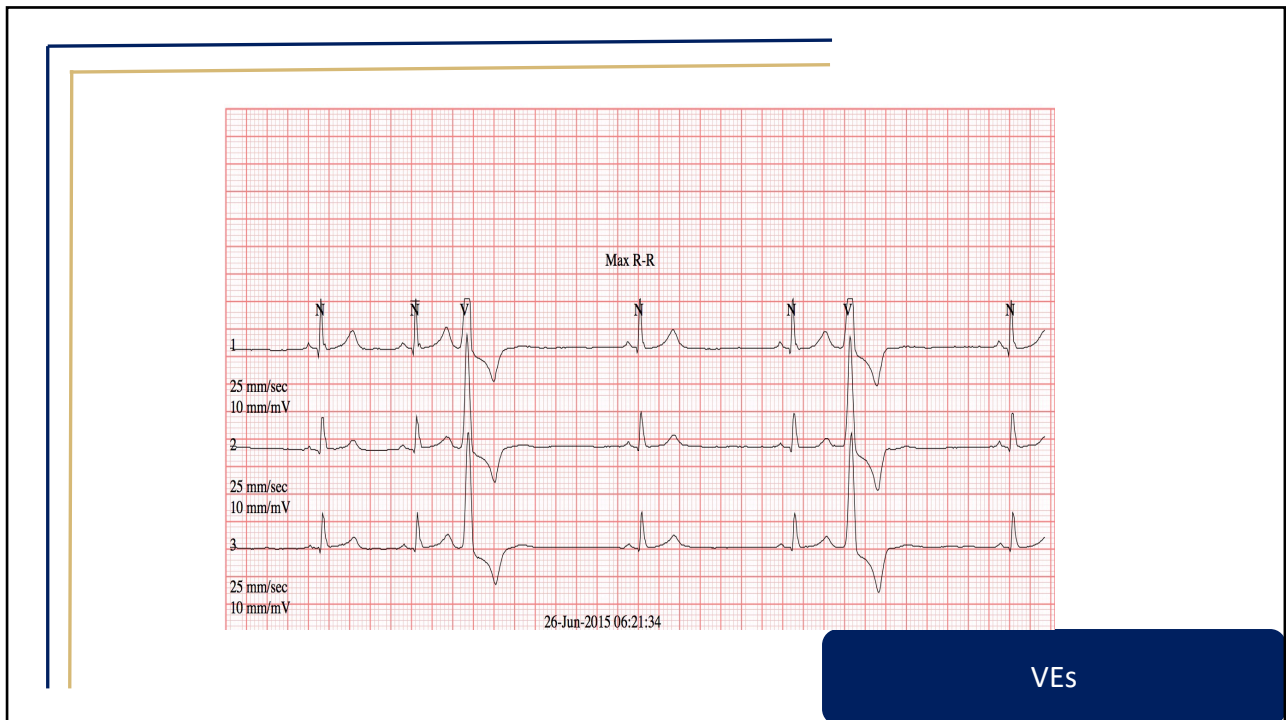
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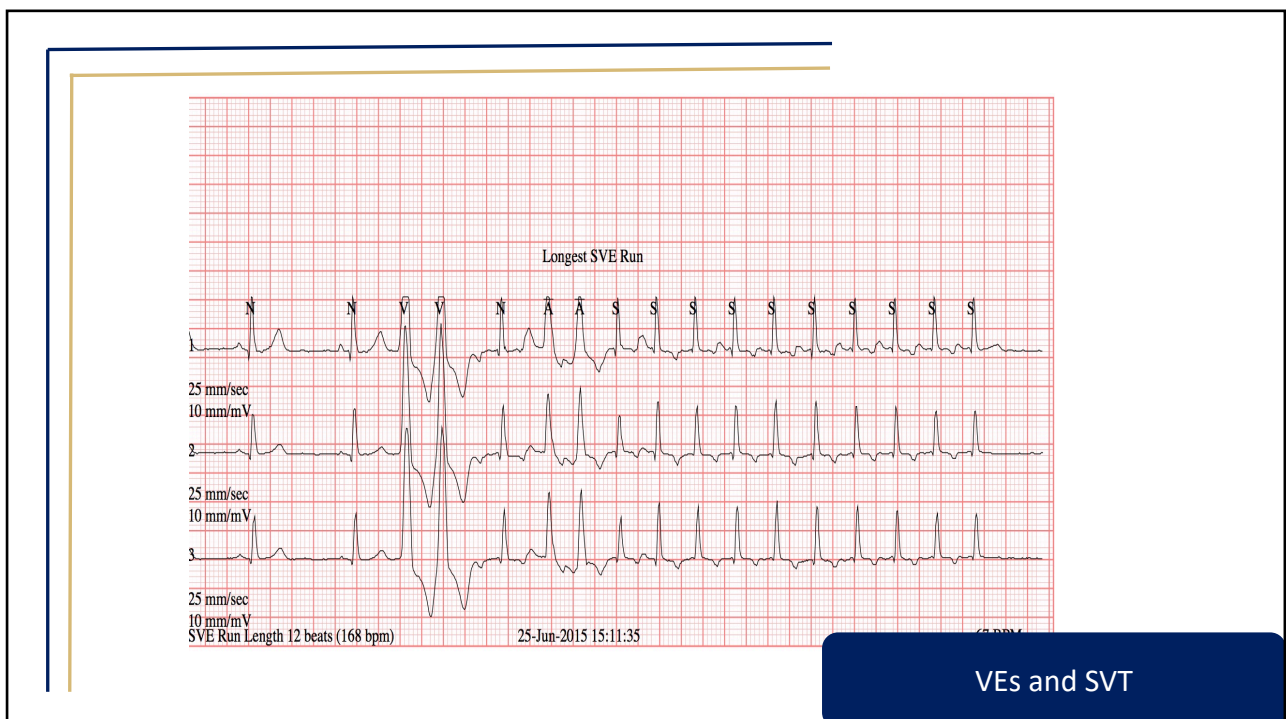
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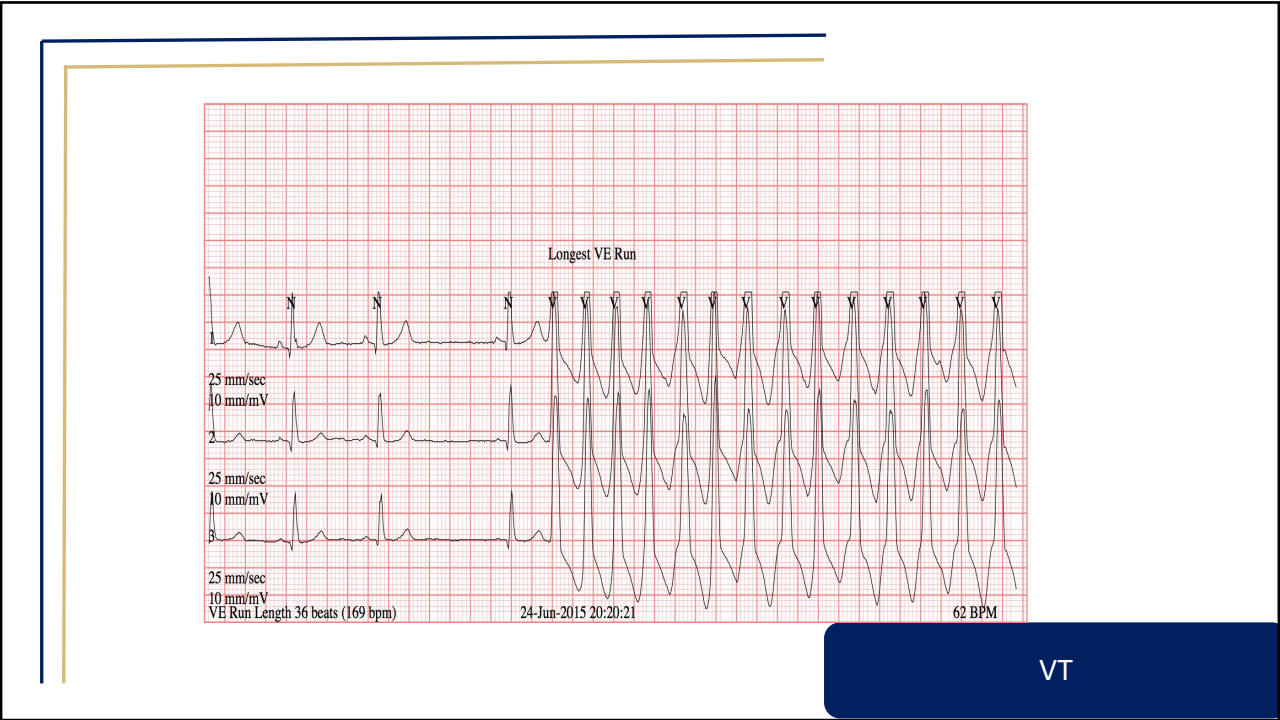
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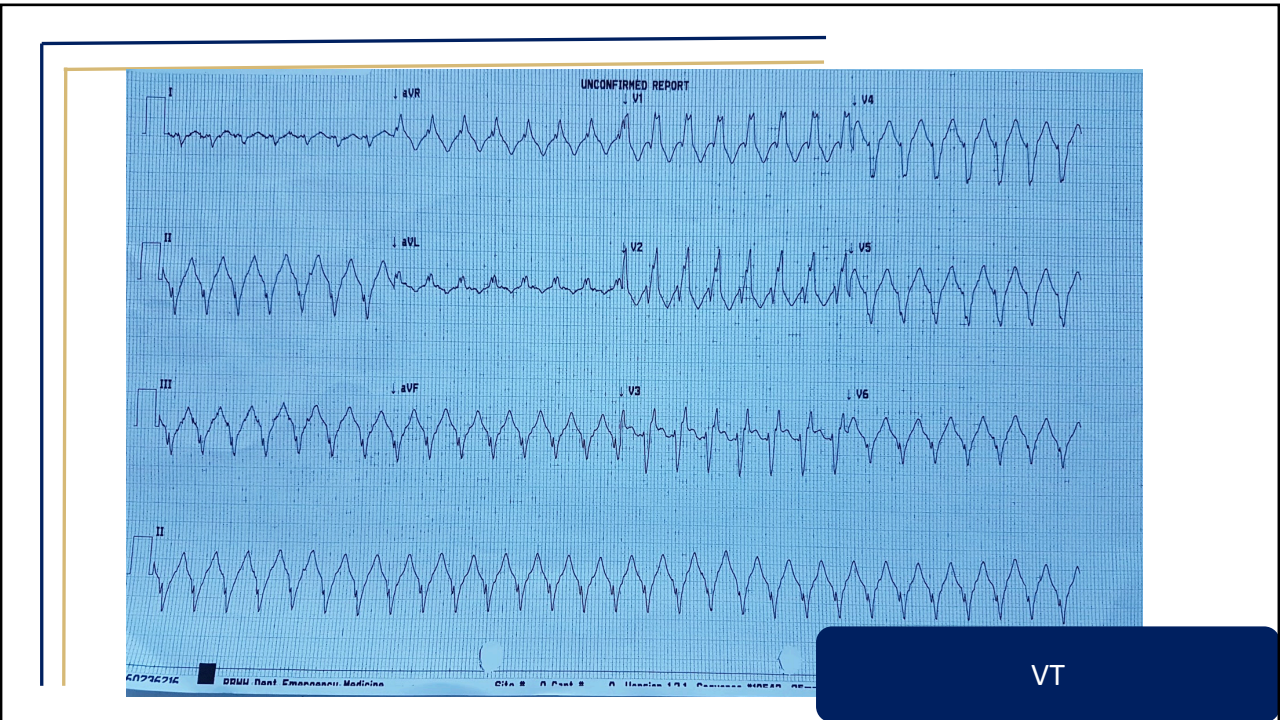
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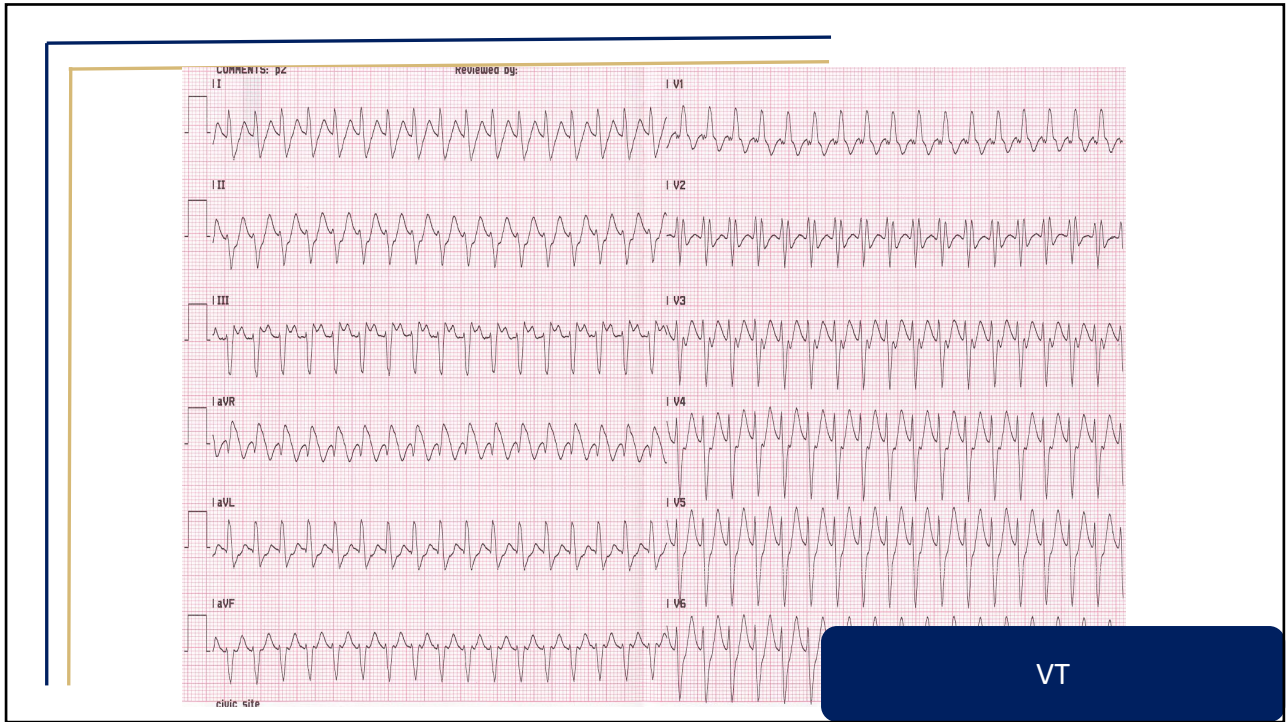
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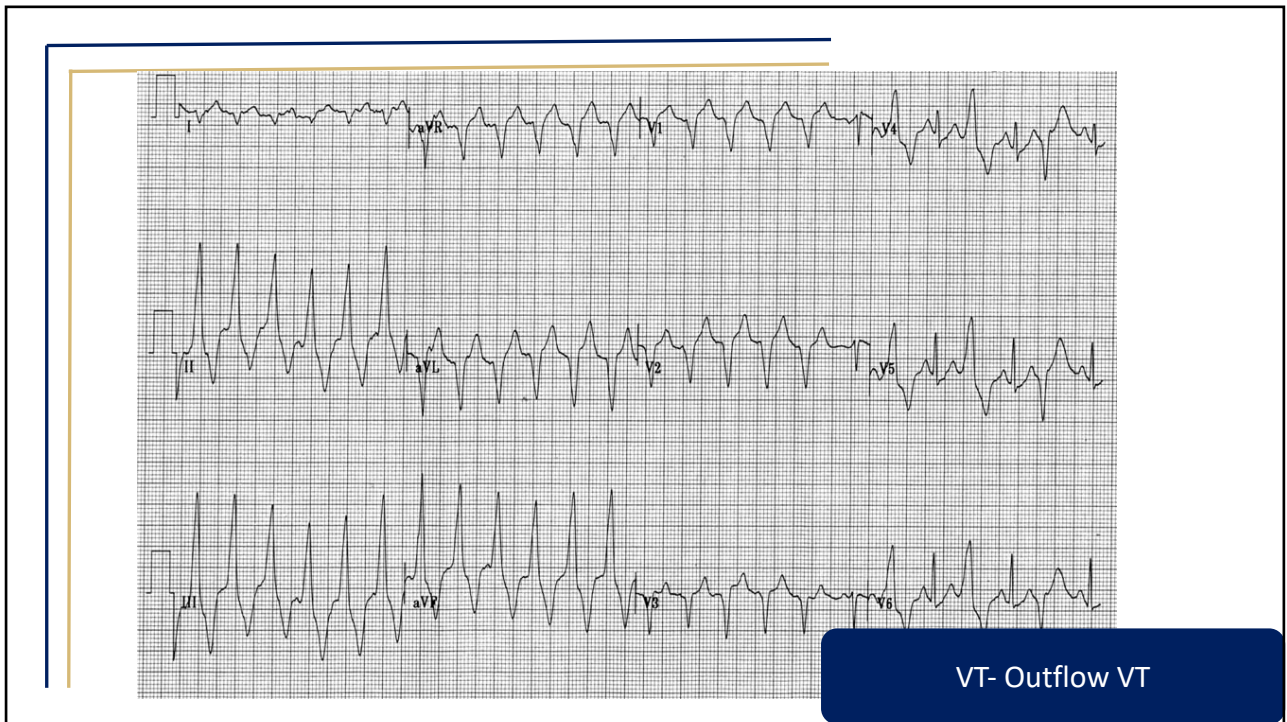
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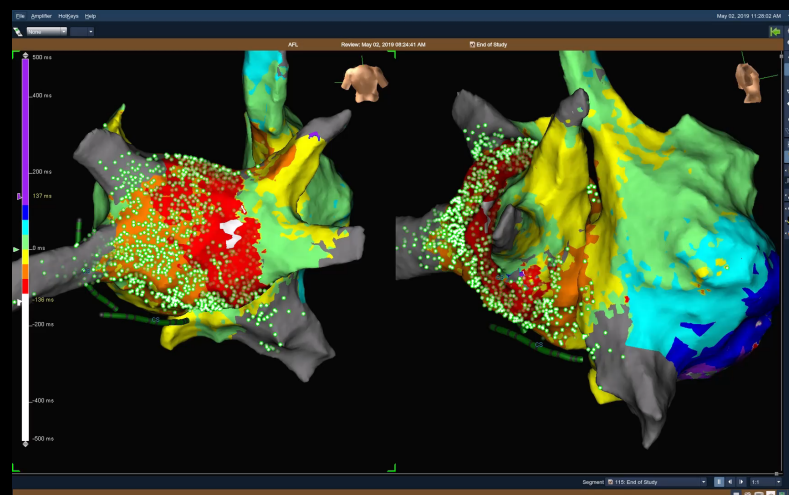


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Summary

- Palpitations are an important reason for presentation to GP practices as well as Cardiology clinics.
- Ruling out underlying structural heart disease is paramount.
- The 12 lead ECG in sinus rhythm can provide many clues .
- Symptom rhythm correlation can be achieved through a variety of strategies.
- Referral to a Cardiologist or an Electrophysiologist can help with the assessment pathway and provide definitive treatment when available.

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Thank you for your attention

