

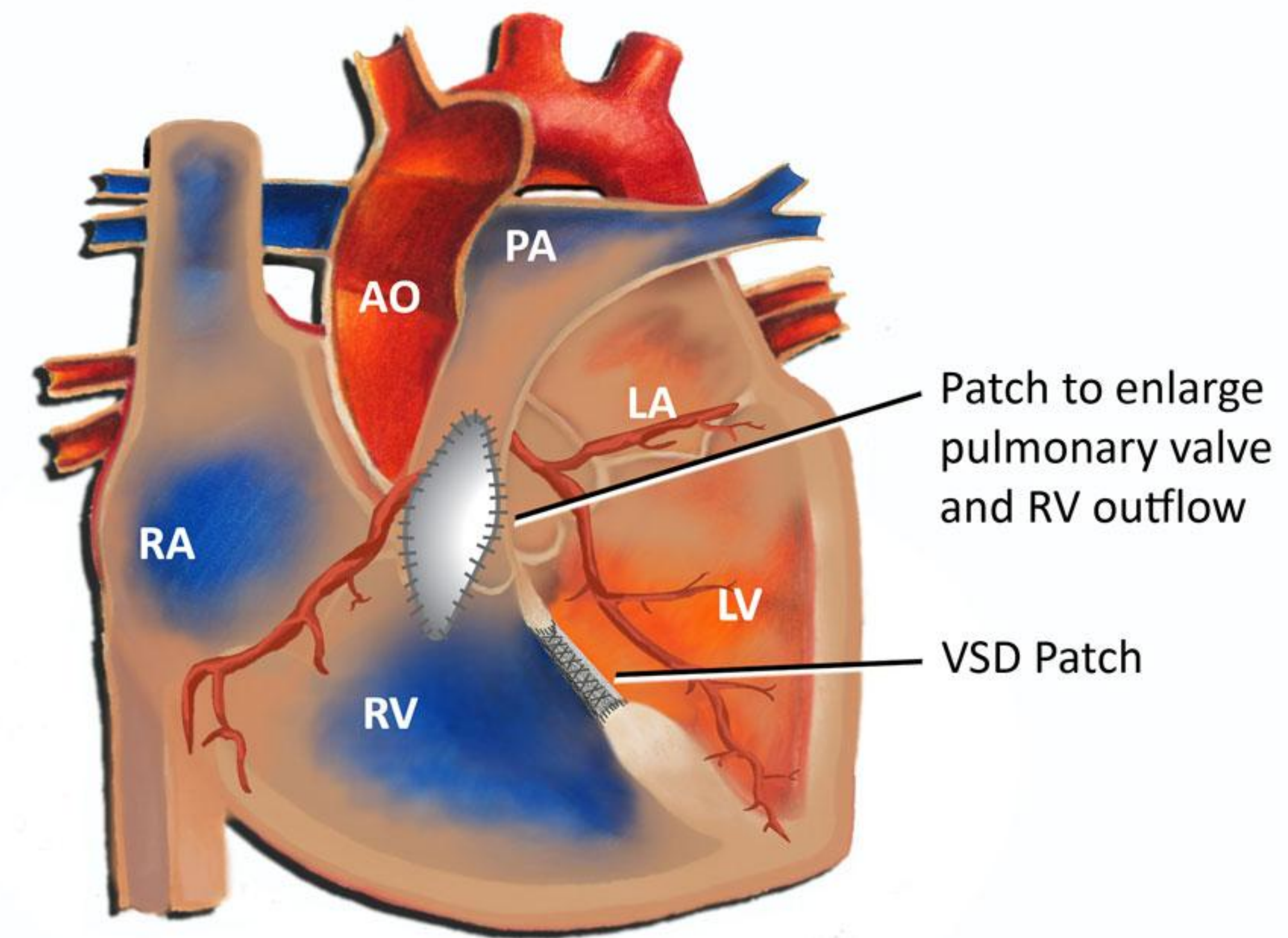
New Onset Complete Heart Block In A Parturient With Corrected Tetralogy Of Fallot

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Introduction

- Tetralogy of Fallot (TOF) is the most common cyanotic congenital heart disease.
- Risk of maternal cardiac events with repaired TOF ranges from 5.7-10.5%
- Complete heart block (CHB) is a rare sequelae of repair of TOF.
- The mechanisms of arrhythmias are diverse and may involve structural, electrical, and hemodynamic factors.
- Transannular patch is a risk factor for late-onset conduction system disease due to scarring.



Transannular patch repair for Tetralogy of Fallot
<https://www.kidsheartshouston.com/answers/21865-tetralogy-of-fallot>

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Case

27yo G1P0 at 32w6d –
VB and PTL found to
have CHB (HR 30s) and
hypoxemia requiring
HFNC.

PMH: DiGeorge
Syndrome and TOF
with transannular
patch repair at age 6

Pads placed for
possible
transcutaneous pacing

C-section delivery
under general
anesthesia due to
acuity and new onset
CHB

RSI with propofol and
rocuronium due to
hyperkalemia (K-
5.8mEq/L) from lactic
acidosis

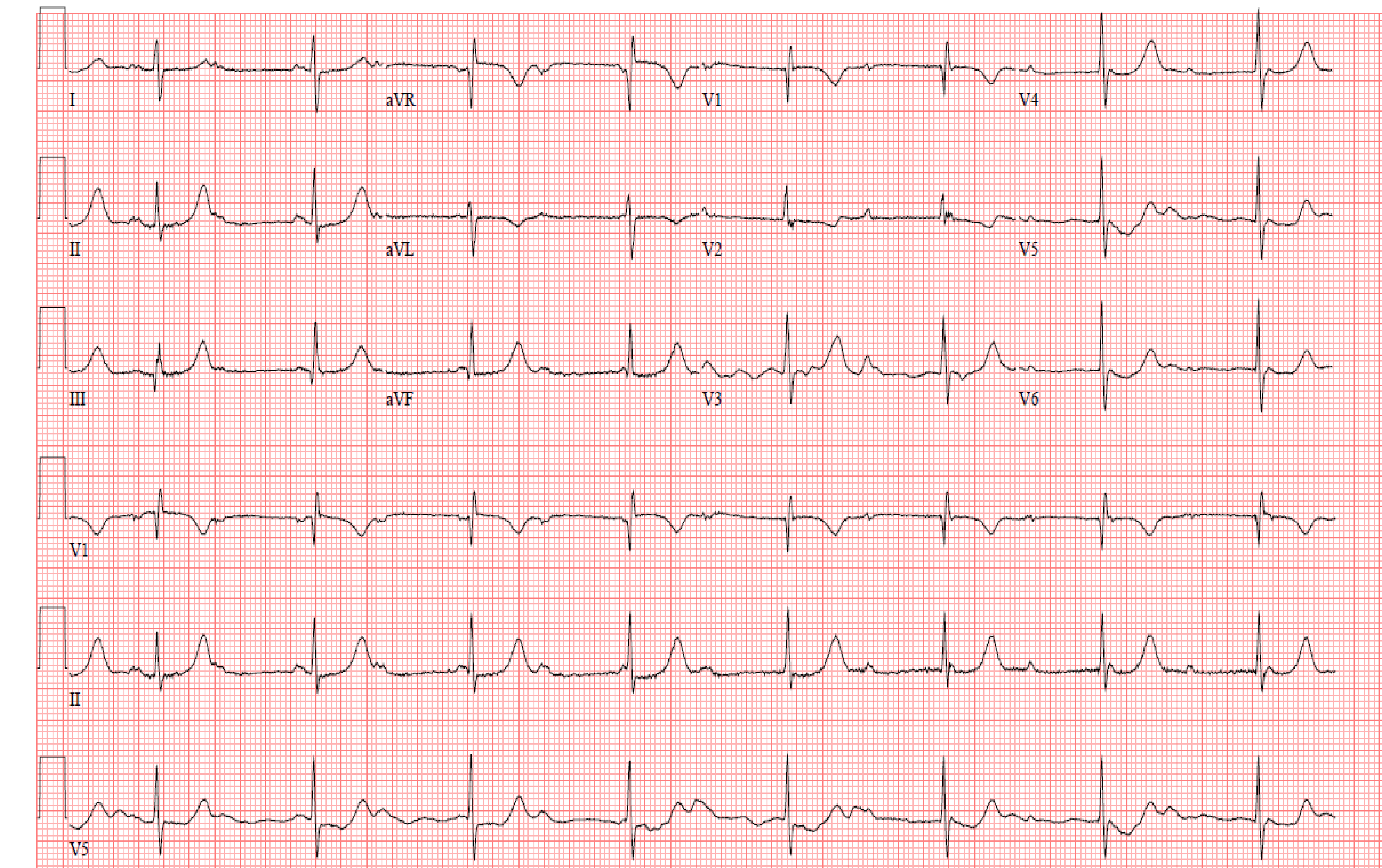
Hyperkalemia treated
with insulin, dextrose
and calcium

Transvenous pacer was
placed following
delivery for possible
hemodynamic
instability postpartum

Transferred to ICU
intubated given
tenuous preop
respiratory status

Extensive workup was
negative for possible
causes of CHB

Permanent dual
chamber pacemaker
placed POD5



Pre-op EKG showing complete A-V block

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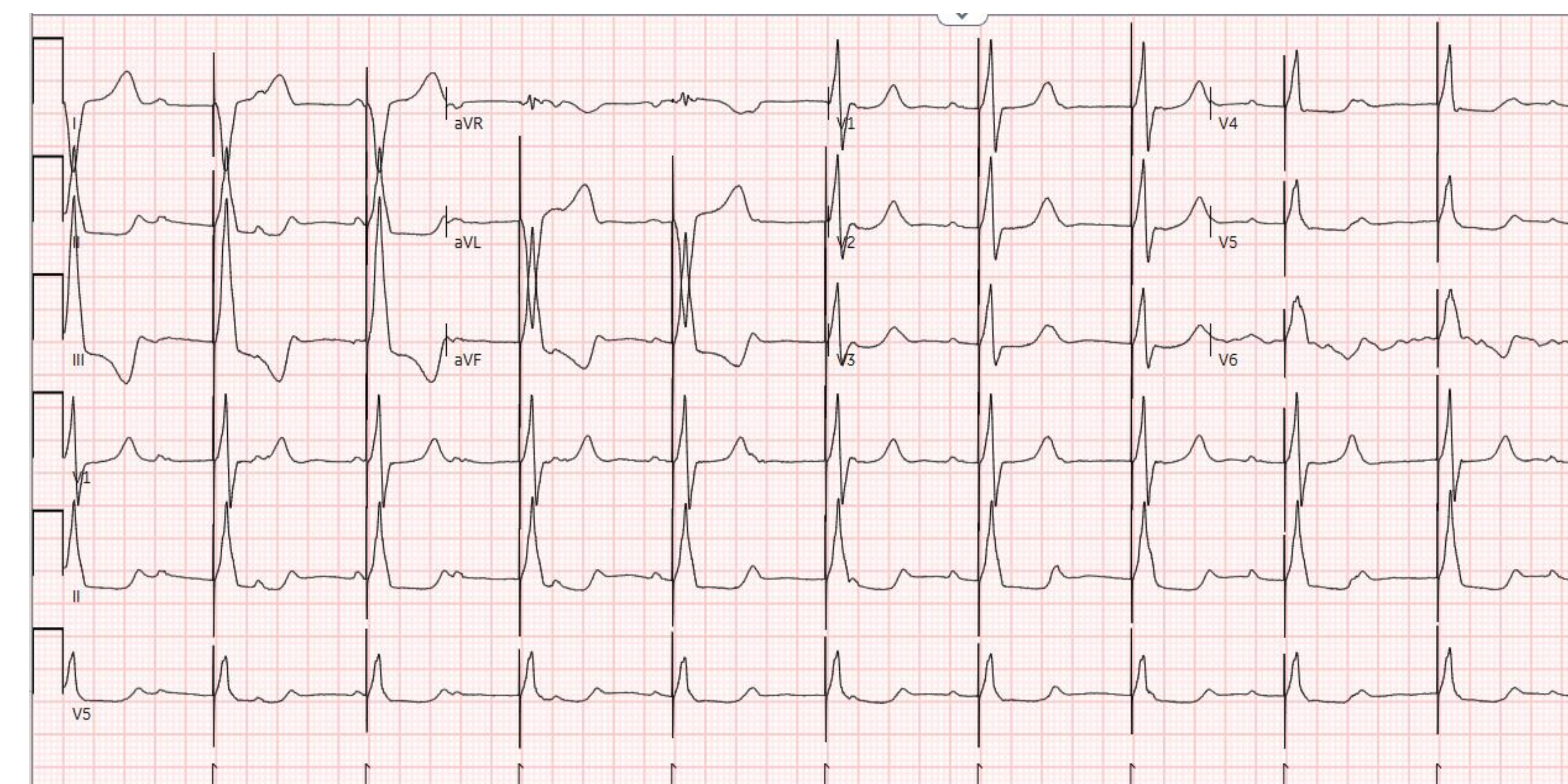
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New-onset or worsening arrhythmias should incite a thorough assessment for altered cardiac physiological conditions, and hemodynamic interventions should prompt careful consideration of arrhythmic issues.

Maternal and fetal outcomes are optimized by a multidisciplinary team and an evidence-based approach.

Choice of anesthesia must be carefully considered, as neuraxial anesthesia can cause sympathetic blockade, which can cause hypotension and worsening bradycardia.

In cases of hemodynamic instability, transcutaneous or transvenous pacing should be initiated promptly.



EKG post Transvenous pacing

Sources

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