

Paroxysmal supraventricular tachycardia in pregnancy – a case report

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Introduction

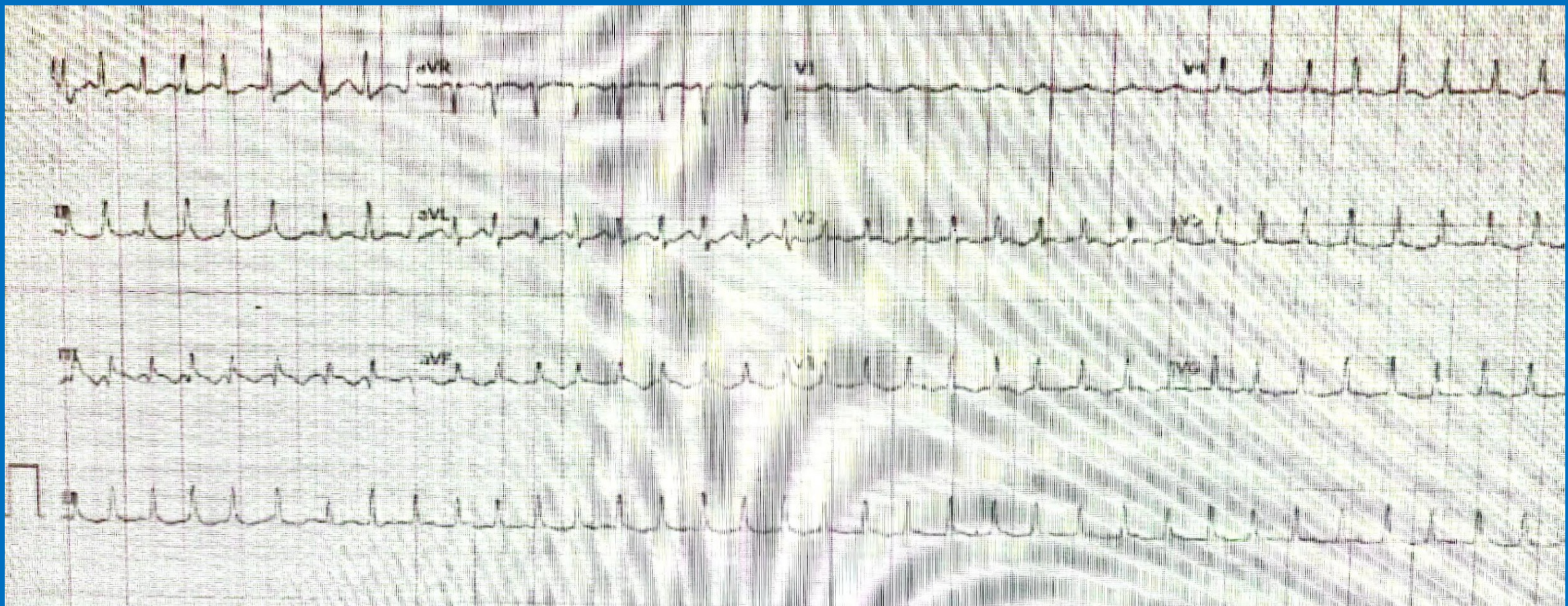
- Arrhythmias are most common cardiac complication during pregnancy manifesting either during pregnancy for the first time or as exacerbation in those with pre-existing arrhythmias.
- Supraventricular tachycardia (SVT) is a tachyarrhythmia characterised by heart rate above 120 bpm

Case Description

- 25-year-old Primi came to emergency department with complaints of palpitations on and off for 2 weeks with tiredness and giddiness.
- H/O previous one episode of palpitations - 8 months ago which resolved of its own .
- O/E pulse was 160/min, BP - 90/60 and saturation 99% room air.
- ECG – SVT.
- Stat dose of metoprolol 25mg followed by 12.5 mg twice daily started, heart rate came down to 119/min.
- Was still symptomatic even on medications and had another episode of SVT after 2 days hence flecainide 50 stat dose followed by twice daily was added.
- Improved symptomatically .
- Detected GDM at 25 weeks on medical nutrition therapy.
- At 28 weeks metoprolol dose was reduced to 12.50 daily and continued with flecainide twice daily.
- Fetal Growth/Liquor /Doppler was monitored at regular intervals - Uneventful
- She delivered at 37 weeks by LSCS for breech presentation, both mother and baby well.
- She is on regular cardiology follow up.

Discussion

- Multidisciplinary team approach including cardiologist, obstetrician , Maternal fetal medicine specialist and neonatologist are important in managing a case of PSVT in pregnancy in order to improve both maternal and fetal outcome.
- Adenosine though first line medication in PSVT but may not be required in all cases
- Palpitations occur frequently during pregnancy and common indications for cardiac evaluation during pregnancy.
- Exact mechanism of increased arrhythmia burden during pregnancy is unclear, but has been attributed to hemodynamic, hormonal, and autonomic changes related to pregnancy.
- The investigations and management of SVT in pregnancy is similar to non-pregnant women.
- Milder cases may go undetected or may be treated with vagal manoeuvres.
- Medical management is preferred if vagal manoeuvres fail and depending on the gestational age.
- Adenosine is first line drug and because of very short life unlikely to enter fetal circulation.
- Beta-blockers can be first line drugs for acute treatment in 2nd/3rdtrimester.
- Electro cardioversion can be used in hemodynamically unstable patients.
- Non fluoroscopic catheter ablation is most effective in SVT but is reserved for refractory cases



Conclusion

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References

- [Drenthen W, Pieper PG, Roos-Hesselink JW, et al. Outcome of pregnancy in women with congenital heart disease: a literature review. J Am Coll Cardiol 2007; 49:2303.](#)
- [Regitz-Zagrosek V, Roos-Hesselink JW, Bauersachs J, et al. 2018 ESC Guidelines for the management of cardiovascular diseases during pregnancy. Eur Heart J 2018; 39:3165.](#)

