

PR28: Modified Valsalva

Applicable To

- ACP and higher

Introduction

The Valsalva manoeuvre should be the first line of treatment for the management of narrow complex supraventricular tachycardia (SVT) in the hemodynamically stable patient. Although there are other vagal stimulation methods available, the Valsalva is the safest and most effective technique for terminating SVT of an unknown mechanism.

The modified Valsalva manoeuvre, with supine repositioning and legs elevated, has been shown to be significantly more likely to restore sinus rhythm than the standard Valsalva manoeuvre. It should be performed over the standard Valsalva whenever possible, given the greater likelihood of success.

Indications

- Hemodynamically stable supraventricular tachycardia (SVT)

Contraindications

- Requirement for immediate cardioversion (hemodynamic instability)
- Hypotension (SBP < 90 mmHG)
- Atrial fibrillation/flutter
- Aortic Stenosis
- Recent myocardial infarction (within 3 months)
- Glaucoma
- Retinopathy
- Third trimester of pregnancy

Procedure

1. Obtain a baseline 12-lead ECG.
2. Explain the procedure to the patient.
3. Position the patient in a semi-recumbent position.
4. Press print on the cardiac monitor.
5. Instruct the patient to perform a forced expiration into a sterile 10 mL syringe for 15 seconds.
6. At the end of the forced expiration, remove the syringe and lay the patient supine with the legs raised straight to 45° for 15 seconds.
7. Reposition the patient to a semi-recumbent position for 45 seconds.
8. Stop printing the on the cardiac monitor once cardioversion is achieved or 45 seconds has elapsed.
9. Repeat 12-lead ECG if cardioversion was achieved.
10. If the procedure was not successful and the SVT has failed to revert, consider repeating the procedure to a maximum of 3 attempts.
 - If repeated attempts are required, ensure the patient has returned to a hemodynamically stable presentation prior to repeating

Notes

- Patients taking beta blockers often demonstrate a blunter blood pressure response to the Valsalva manoeuvre.

Resources

References

1. Appelboam A, et al. Postural modification to the standard Valsalva manoeuvre for emergency treatment of supraventricular tachycardias (REVERT): A randomised controlled trial. 2015. [\[Link\]](#)
2. Page RL, et al. 2015 ACC/AHA/HRS Guideline for the management of adult patients with supraventricular tachycardia. 2015. [\[Link\]](#)
3. Queensland Ambulance Service. Clinical practice procedures: Cardiac/modified Valsalva manoeuvre. 2017. [\[Link\]](#)

