

Flip the beat: reverse Valsalva in SVT

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Background: Supraventricular tachycardia (SVT) is a common emergency department presentation. Vagal manoeuvres are recommended as first-line, non-pharmacological management in hemodynamically stable patients. Although the Modified Valsalva manoeuvre has demonstrated superior efficacy, it requires assistance, patient repositioning, and equipment, which may limit its universal applicability.

Objective: To evaluate the effectiveness of the Reverse Valsalva Manoeuvre (RVM), a simple, equipment-free technique, in terminating SVT.

Methods: A case-series study was conducted at a tertiary care centre in Tamil Nadu, India. Ten adult patients presenting with SVT were included. Demographic data, comorbidities, prior interventions, and outcomes were recorded. The RVM involved inhalation against resistance by sealing the mouth and pinching the nose. The primary outcome was successful reversion to sinus rhythm.

Results: Of the 10 patients, 6 were male and 4 female; 8 had underlying cardiac disease or previous SVT, 6 were diabetic, and 4 hypertensive. Before RVM, 7 patients had undergone other vagal manoeuvres, and 2 had received adenosine without successful rhythm conversion. RVM successfully reverted SVT to sinus rhythm in 8 patients, with conversion occurring within 10–15 seconds. No immediate adverse events were observed.

Discussion: The RVM is postulated to increase vagal tone and reduce sympathetic activity through negative intrathoracic pressure generation, possibly mediated by the Bezold–Jarisch reflex. Its rapid onset and autonomous nature may reduce delays in rhythm conversion and limit the need for pharmacological intervention.

Conclusion: The Reverse Valsalva Manoeuvre appears to be a safe, simple, and self-performable technique for SVT termination. It represents a promising alternative to the Modified Valsalva manoeuvre and may have a role in redefining first-line, non-pharmacological SVT management, particularly in resource-limited, prehospital, or patient-directed settings.

Keywords: Vagal manoeuvres, equipment free, self performable.