

LETTER TO EDITOR

A Simple Device to Control Valsalva Manoeuvre Strain Pressure; a Letter to Editor

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Dear Editor:

We read with interest the article by Motamedi and colleagues about the use of a hand held manometer to measure strain pressure during Valsalva manoeuvre (VM) treatment of supraventricular tachycardia (SVT) (1). We also used a manometer in our study (REVERT) of a postural modification of the VM and are currently investigating the use of a simple, single patient use device to control VM strain pressure, NCT number:

NCT03298880 (2, 3). Such a device would be useful as blood pressure manometers are not always available and cannot be left with patients and other methods of generating the recommended strain such as syringes have been shown to be unreliable (4).

We note that Motamedi's study demonstrated a cardioversion rate of 14.8% in supine participants, which was similar to the rate achieved in the REVERT trial by control participants in the semi recumbent position (17%) (2).

In contrast, participants randomised to the modified VM in the REVERT trial, had a markedly improved cardioversion rate of 43% (2). This modification required participants to perform a 40 mmHg pressure strain for 15 seconds in a semi recumbent position but with supine repositioning and passive leg raise immediately after the Valsalva strain. To our knowledge this is the first trial to study this modification and was not described in the "new modified version" quoted and referenced in Motamedi's paper. To achieve the best cardioversion rates, we recommend use of a modified VM as described above with the strain controlled by a manometer where possible. A simple, single patient use device designed to deliver the recommended pressure may be helpful to facilitate this in practice and could be kept by patients for future use (3).

1. Appendix

1.1. Acknowledgements

Not Applicable.

1.2. Author's contribution

Isabel FitzGerald wrote and Andrew Appelboam edited the manuscript.

1.3. Conflict of interest

No Conflict of interests.

1.4. Funding and support

Not Applicable.

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