

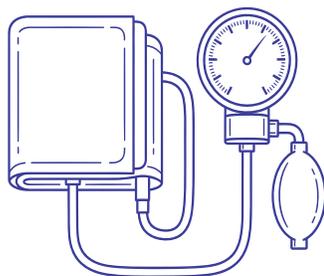
Goal Directed Valsalva Supplies

There are various ways to set up Goal Directed Valsalva (GDV) in your lab. Check with your leadership and Infection Prevention Department at your institution for guidance on requirements to implement. The list below describes the equipment needed and the process used for employing the GDV method using an analogue sphygmomanometer.

- » GDV eliminates variability in methodology for Valsalva and informs the reader/care team of the level of effort achieved.
- » Using GDV, when done effectively, eliminates the need for "compression" during Valsalva.
- » When using GDV for evaluation of LVOT gradients, it is imperative to hold for 10 seconds, allowing the reduction of stroke volume on the left side to occur.

EQUIPMENT

- 1 Analogue Sphygmomanometer or a Free-Standing Sphygmomanometer
- 2 Oxygen Tubing



Filter Option 1

- » Carbon Filter if required for infection prevention
- » The Filter connector and 5 ml syringe
- » Full connection with filter

Filter Option 2

- » Bacterial Viral Filter
- » Tapered Nipple Tubing Adapter

REFERENCE:

Kumar S, Van Ness G, Bender A, Yadava M, Minnier J, Ravi S, et al. Standardized Goal-Directed Valsalva Maneuver for Assessment of Inducible Left Ventricular Outflow Tract Obstruction in Hypertrophic Cardiomyopathy. *J Am Soc Echocardiogr.* 2018;31:791-8.

PROCEDURE

- 1 Remove the coiled tubing from the sphygmomanometer (the tubing that it came with).
- 2 The O2 tubing can be left at the 7' ft length or cut to the desired length depending on your lab set up.
- 3 Attach the non-cut end to the valve on the sphygmomanometer (see images below).



- 4 Place the sphygmomanometer in a position so the patient can see the clock face.
- 5 Give the patient the other end of the oxygen tubing or the syringe and filter set up.
- 6 Ask the patient to blow into the tubing until the dial reaches 40 mmHg.
- 7 Practice with the patient, managing inspiration/expiration so that when they prepare to blow and release the image is not lost.
- 8 When ready, have the patient blow, obtaining 40 mmHg, or best effort if cannot reach 40 mmHg. The patient must hold for 10 sec for an effective Valsalva. See attached article.
- 9 If the patient does not reach 40 mmHg, this can be documented, see reporting section.

REPORTING

- 1 Document intraoral pressure achieved and length of hold.
 - a. The patient achieved ____ mmHg of intraoral pressure using the sphygmomanometer and held pressure for ____ seconds.

