



How to....

Use SIMV and Pressure Support

Synchronous Intermittent Mandatory Ventilation (SIMV)

SIMV was developed as a result of the problem of high respiratory rates associated with PTV. SIMV delivers the preset pressure and rate while allowing the patient to breathe spontaneously in between ventilator breaths.

Each ventilator breath is delivered in synchrony with the patient's breaths, yet the patient is allowed to completely control the spontaneous breaths.

SIMV is used as a primary mode of ventilation, as well as a weaning mode. (During weaning, the preset rate is gradually reduced, allowing the patient to slowly regain breathing on his or her own).

A consideration when using this mode is that it may increase the work of breathing and respiratory muscle fatigue with lower rates.

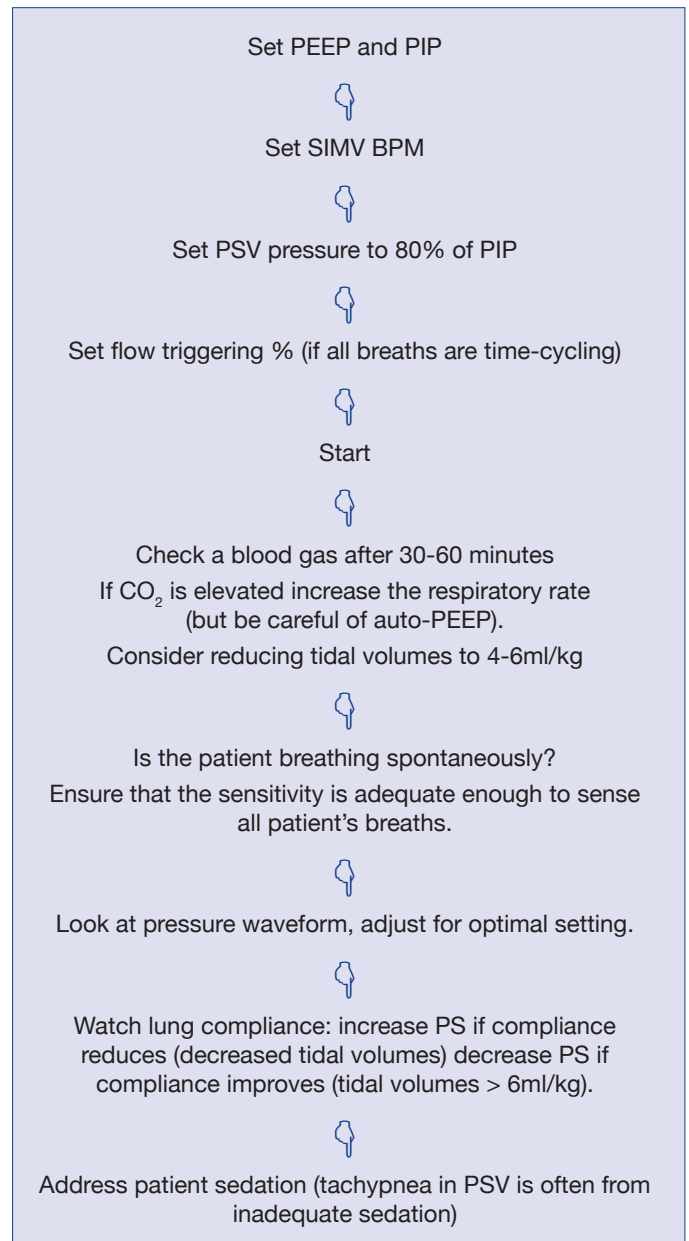
Pressure Support Ventilation (PSV)

PSV is a commonly used mode of ventilation.

PSV is patient-triggered, pressure-limited and flow cycled. SLE5000 will allow time cycling in the event of patient leak secondary to a cuffless endotracheal tube. Initial airway pressure is determined by the pressure support setting and the pressure rise-time setting.

The rise-time setting is a clinician-adjustable parameter using the waveform shape adjustment. PSV is preset pressure that augments the patient's spontaneous inspiratory effort and decreases the work of breathing. The patient completely controls the respiratory rate and tidal volume.

PSV is used for patients with a stable respiratory status and is often used with SIMV spontaneous breaths to overcome the resistance of breathing through ventilator circuits and tubing with no increase in pressure (spontaneous breaths).



"How to..." is published as a guideline by SLE Ltd, and should only be carried out by, or on the orders of a Registered Physician. It is strongly recommended that all treatments are tailored to the individual patient.

