

## **Ventilatory Management Guidelines for Laparoscopy with Steep Trendelenburg**

1. Utilize pressure-support ventilation mode
2. Avoid PEEP if it is causing excessive peak inspiratory pressures
3. Utilize the concept of mild permissive hypercapnea (ET CO<sub>2</sub> 40 to 50)
4. Acceptable tidal volume: 6-7 ml/kg ideal body wt
5. Consider B2 agonist therapy
6. After placement into steep T-burg, allow a few minutes for optimization of VQ matching (i.e. wait for the effect of hypoxic pulmonary vasoconstriction)
7. Ensure that insufflation pressure is not > 14 cm H<sub>2</sub>O
8. After addressing all of the above, the following parameters are unacceptable:
  - PIP > 45 cm H<sub>2</sub>O
  - FiO<sub>2</sub> > 50% to maintain SpO<sub>2</sub> of 95%
  - ET CO<sub>2</sub> > 50 at a respiratory rate of at least 12
9. Corrective Actions:
  - Less T-burg
  - Convert to open
  - Cancel case for pulmonary optimization