Over the last 10 years, due to marked improvements in the field of technology of computer, optics and surgical equipments, the Video Assisted Thoracoscopic surgeries (VATS) have been widely accepted for management of many surgical conditions in all age groups.

Why VATS? It is commonly accepted that these techniques lead to improved outcomes compared to conventional open surgery through: reduction of post operative pain, avoidance of large incisions, quicker functional recovery and thus shorter hospital stay. This actually may be the situation from the surgical point of view, but from the anesthetic point of view, VATS exposes the patient to more physiological derangement and thus more potential problems.

Thoracic applications include: Exploration, biopsy, drainage of emphysema, haematoma, cysts, metastasis and lobectomies.

One absolute requirement for the success of such operations is to maintain a good field of vision. To achieve this, the lung of the operative side should be collapsed with special ventilatory techniques to assist the surgeon in his work. Conventional PPV using SLTT badly interferes with visualization of thoracic contents.