

Avoiding complications in use of SLAs with particular reference to SLIPA™ safety features.
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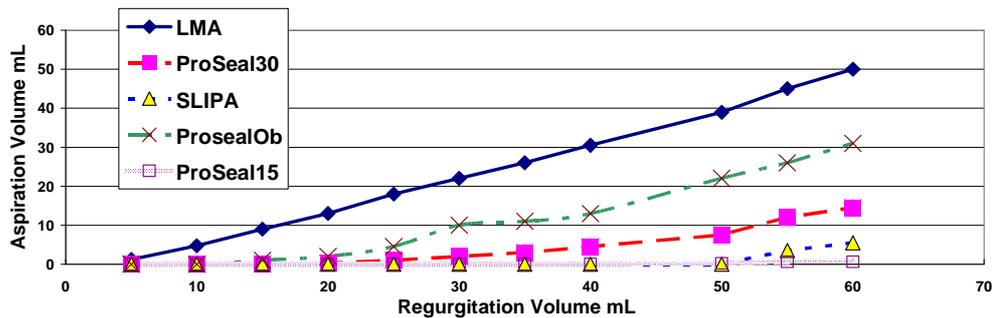
Trauma to the airway

- Wrong insertion techniques in relation to different SLA designs
- Combitube – better to use laryngoscope.
- Repositioning of pharyngeal cuff inflation airways.
- Opposing insertion techniques of LMA and SLIPA

Aspiration protection mechanisms

- Obstruction; Drainage tubes; Storage – effectiveness?

Storage for aspiration protection



Results of aspiration model lung with LMA (◆), ProSeal with drainage tube obstructed (×), ProSeal with 30 ml sec⁻¹ (■) and 15 ml sec⁻¹(□) and SLIPA (Δ) airway.

Neuropraxias mechanisms

- Hypoglossal nerve: is 1 mm from tip of hyoid bone.
- Recurrent laryngeal nerve at entrance to oesophagus
- Lingual nerve

Preventive strategies (more relevant to design than clinical application):

- Use smaller sizes (?practicality as there is already a limited seal pressure)
- Avoid high cuff inflation pressure with indiscriminate constant pressure
- Avoid local pressure at vulnerable sites

Future improvements if SLAs are to advance:

- Higher seal pressures
 - Limited by gastro-esophageal insufflation with higher seal pressures
 - Neuropraxia risk increases with high cuff pressures
- Epiglottic downfolding
 - Affects airflow and tracheal tube access
- Improved comfort and tolerance for application in the ICU?
- Suitability for wider application of instrumentation