7. Aim of the study

To assess the response of the subglottic and upper tracheal mucosa to intubation induced injury and medication.
7.1. Objectives of the study

1. To establish an animal model for laryngotracheal injuries following endotracheal intubation.
   a. To establish an animal model for post-intubation laryngotracheal injuries resulting in significant laryngotracheal insult without compromising the survival of the animal for a minimum period of 12 weeks post-extubation.
   b. To study the extent of injury based on morphometric and histopathological change seen at 12 weeks post-extubation.

2. To evaluate the role of Mitomycin-C and Triamcinolone Acetonide in acute and chronic healing process following injury due to endotracheal intubation in this animal model.
7.2. Hypothesis

- Null hypothesis:

  Application of topical medication does not alter the process of wound healing following intubation induced laryngotracheal injury.

- Alternative hypothesis:

  Topical medication alters the process of wound healing in post-intubation laryngotracheal injury.