Surgical considerations for tracheostomy: lessons from the SARS outbreak

Journal Article, View Point based on literature

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Summary

Methods:

- This is a "viewpoint" article authored by ENT specialists from National University of Singapore.
- The authors reviewed literature pertaining to tracheostomy during the SARS outbreak in 2003 and supplemented it with their own contingency plans during two epidemics.
- 3 case series and 2 case reports were reviewed

Viewpoints:

- Although there is lack of data, surgical tracheostomy seems to be a safer alternative to percutaneous.
- Tracheostomy is a high risk, high aerosol generating procedure and should be done by an experienced team and using the maximum possible PPEs.
- It should be done either at the bedside or close to the ICU in negative pressure rooms. Hence, patients may be triaged to "position" them in ICU. Patients likely to require tracheostomy should be placed closer to an operating room so that shifting is easier.
- The published experience of 15 tracheostomies in Singapore and 3 each in Toronto and Hong Kong during the SARS pandemic reported no transmission to health care workers and attributed it to preparedness.
- Having a dedicated, experienced team comprising a surgeon, an anesthetist, and a scrub nurse to perform tracheostomies will allow familiarity and minimize setup time.
- Communication plans within the room need to be pre-established because conversing through PPE and PAPRs can be extremely difficult.
- The following procedure related tricks are advised: Completely paralyse patient to prevent coughing, stop ventilation just before entering into trachea, avoid suction, if required, use it in closed system with viral filter.
- Centres getting large number of sick patients should be geared up for better execution.

Conclusion:

- Several patients will require tracheostomy in busy ICUs catering to COVID care.
- The article highlights points for planning the procedure and its execution.
- Risk to healthcare workers is negligible if proper precautions are followed.

Appraisal

- Although the level of evidence is low, it is based on the limited available literature
- The authors have largely extrapolated experience from SARS pandemic to COVID

Opinion

This viewpoint has been authored by ENT clinicians from Singapore who have been involved in tracheostomy procedure and care during SARS 2003 Outbreak. They have reviewed the limited literature available on the subject. The information can be used by anesthetists and surgeons who are involved in tracheostomy care for COVID 19 patients.

Appraisers

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