



Airway Management

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According to thanatology, the scientific study of death, the emergency patient care is particular since it demands attention to factors that can lead the patient to death, even before considering the causes that brought him/her to the emergency service. In trauma victims, inadequate supply of oxygen to the brain and other structure is the fastest factor that can lead to death, regardless of the etiology; therefore, the assessment of airway stability and ventilation capacity should receive top priority in the initial care of these patients. In all cases, cervical spine must be kept stable as well as assisted ventilation with a mask provided with a one-way valve and oxygen reservoir must be offered.

Patients who arrive in the emergency service in apnea or with reduced level of consciousness should be approached immediately with airway management maneuvers such as head-tilt chin lift and jaw-thrust, procedures performed to prevent hypopharynx obstruction by the patient's tongue. Many times, these simple maneuvers ensure airway patency and relieve hypoxemia. However, on many occasions, the airway must be guaranteed by endotracheal intubation or by performing a surgical airway.

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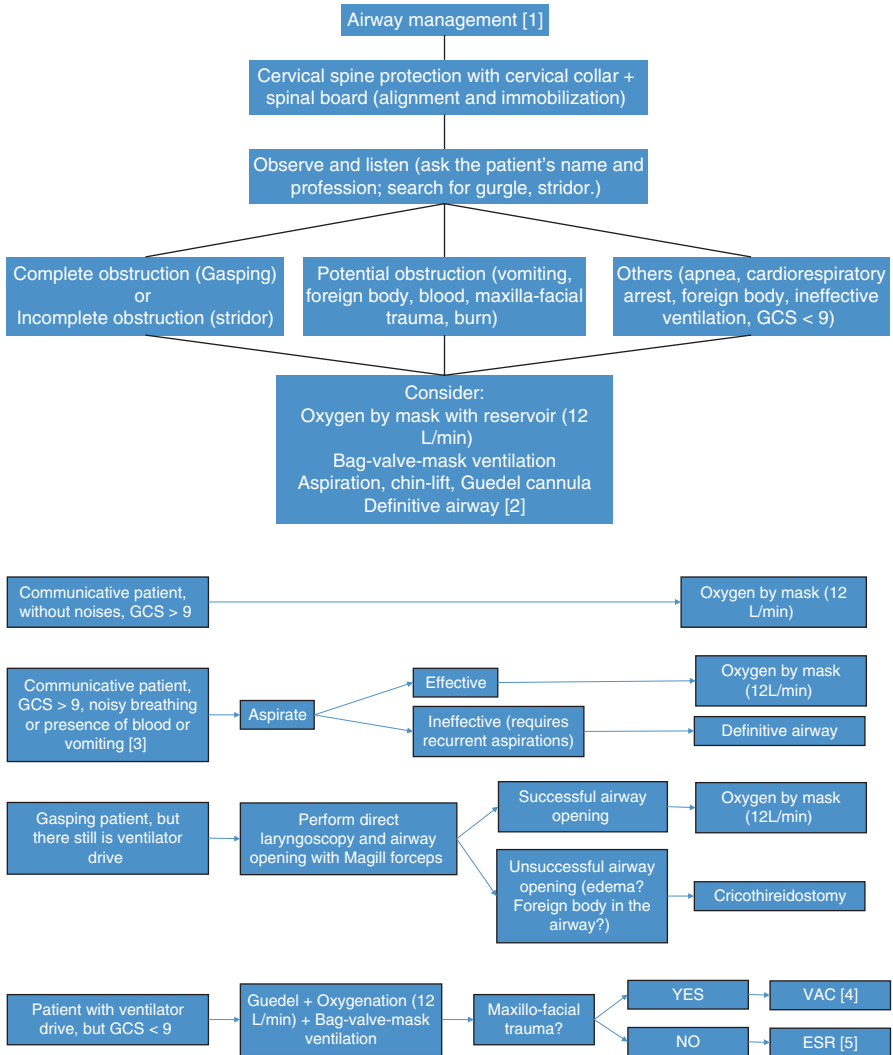
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In these cases, in which an intervention is required, particular attention should always be paid for basic care in performing the procedure, such as positioning the endotracheal tube adequately with an inflated balloon. The tube should also be linked to an assisted ventilation system with supplementary oxygen.



7.1 Conclusion

- (1) It can be helpful to perform the LEMON method proposed by the eighth ATLS edition, which predicts a difficult orotracheal intubation and is based on (a) external inspection; (b) anatomical relations of the axis pharynx-larynx-mouth; (c) Mallampati's classification; (e) neck mobility.
- (2) The first option is cricothyroidotomy. However, patients with laryngeal trauma could require a tracheostomy, which will stabilize the airway below the lesion level.
- (3) Suggestive of potential airway obstruction or partial obstruction.
- (4) Surgical airway.
- (5) Rapid sequence intubation (RSI) is a fast and effective method of performing endotracheal intubation with prior sedation of the patient, which is based on five steps: (a) preparation of the patient, intubation equipment, and materials required to perform an emergency surgical airway if needed; (b) pre-oxygenation of the patient; (c) medication of the patient with intravenous sedatives such as midazolam (0.1–0.5 mg/kg) or even opioids such as fentanyl (2–3 mcg/kg); (d) paralysis of the patient with intravenous neuromuscular blockers such as succinylcholine (0.5–0.6 mg/kg) or rocuronium (0.06 mg/kg); (e) positioning of the tube.

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