MANAGEMENT FOR EPIGLOTITTIS

Do's

- Call for senior help
  Paediatric registrar /
  Consultant **Anaesthetist** registrar /
  Consultant **ENT surgeon**
  ConsultantPaediatrician
- Allow the child to remain in its favoured position.
- The child should be constantly supervised by someone skilled in intubation.
- Give humidified oxygen as tolerated

Don't

- Attempt oropharngeal examination, since this may precipitate complete obstruction.
- Attempt insertion of an IV cannula or take blood.
- Send the child for neck X-ray or other X-ray
- Upset the child e.g removing parents.
- Leave the child unsupervised
- Rely only on pulse oximetry

1. **Indications for intubation**
   a. Suspected epiglottitis
   b. Inhalational injury
   c. Fall in conscious level
   d. Increasing respiratory failure
   e. Rising pCO_2
   f. Exhaustion
   g. Hypoxia (SpO_2 <92% despite high-flow O_2 by mask >5 L/min)

2. **Management of intubation**
   a) The most experienced anaesthetist must be present at the intubation. Most anaesthetists would favour a gas induction. The resuscitation team have a backup oxygenation strategy prepared.

   b) It may be necessary to use croup tubes rather than standard ETT. These are longer than standard ETT, but come in similar sizes, and may be necessary in situations where severe airway narrowing mandates a much smaller ETT than indicated by age (e.g. a 4.0 mm ETT for a 6 year old).

   Management following intubation
   c) Once the airway obstruction is bypassed, most children are easy to ventilate. Exceptions might be in case of bacterial tracheitis (with pulmonary involvement), inhalational injury (ARDS), or anaphylaxis(bronchoconstriction).
   d) Ensure that the ETT is securely taped.

4. **Transport considerations**
   - Children with an unstable airway should not be transported without a detailed discussion with the on call consultant**.**
   - ETCO2 monitoring is mandatory during transfer to maintain continuous correct ETT placement.
   - Use continuous muscle relaxation during retrieval to ensure safety of ETT.
   - If transporting an un-intubated child with suspected foreign body obstruction, avoid unnecessary delay and transfer immediately to the ENT center of a Teaching or Provincial hospital directly to operating theatre if necessary. The team must have a strategy to manage unexpected obstruction or hypoxia.

3. **Use sedation and paralysis to ensure safety of ETT.**
   a. Following a difficult intubation, an ETT should only be changed if there is a clear clinical reason which justifies this risk.
   b. Start adjunctive treatments such as iv dexamethasone (0.15 mg/kg qids) in case of croup; or ceftriaxone (80 mg/kg) in case of epiglottitis or bacterial tracheitis.
   c. Blood cultures must be taken in suspected cases of infection.
   d. In case of inhalation injury and burns, start fluid replacement as per burns guidelines.
   e. Patients with bacterial tracheitis may become septic, and need fluid resuscitation and inotropic support.