

3-6 Laryngospasm and stridor v.1

- Laryngospasm usually occurs when a patient is in a light plane of anaesthesia and their airway is stimulated in some way.
- Stridor is a sign and associated with laryngospasm (although it can have other causes).

START

- 1 Call for help and inform theatre team of problem.
- 2 Perform jaw thrust and stop any other stimulation.
- 3 Remove airway devices and anything else that may be stimulating or obstructing the airway, e.g. suction catheters, blood or vomit (direct visualisation and suction if in doubt).
 - A correctly positioned tracheal tube rules out laryngospasm.
- 4 Give CPAP with 100% oxygen and face mask:
 - Avoid over-vigorous attempts at lung inflation, as this may inflate the stomach.
 - Insert an oro-pharyngeal and/or nasal airway if you are not sure that the airway is clear above the larynx.
- 5 If problem persists:
 - Continue CPAP.
 - Deepen anaesthesia.
 - Give a neuromuscular blocker (See Box A).
- 6 Consider tracheal intubation particularly if likely to recur.
- 7 Use nasogastric tube to decompress the stomach.
- 8 Consider other causes (Box B).
- 9 Consider whether guideline **2-3 Increased airway pressure** may help.
- 10 Consider the appropriate strategy, location and support needed for waking the patient.
- 11 Continued airway and ventilation support may be necessary if aspiration has occurred or if the patient has developed negative-pressure pulmonary oedema.

Box A: DRUG DOSES FOR TREATMENT OF LARYNGOSPASM

0.25-0.5 mg.kg⁻¹ i.v.:

- Propofol
- Rocuronium
- Atracurium
- Suxamethonium (also i.m. including tongue 4.0 mg.kg⁻¹)

Box B: ALTERNATIVES and MIMICS

Foreign body	Intrinsic laryngeal or tracheal obstruction
Infection of larynx/upper respiratory tract	Extrinsic laryngeal or tracheal compression
Anaphylaxis	Sub-glottic stenosis
Airway tumour	Laryngo/tracheomalacia
Vocal cord paralysis	

Box C: CRITICAL CHANGES

- Cardiac arrest → **2-1**
- Hypoxia/desaturation/cyanosis → **2-2**
- Increased airway pressure → **2-3**
- Hypotension → **2-4**
- Bradycardia → **2-6**