Syllabus	PA_IS_06
Topic	Stridor

You are asked to assess a 2 year old girl in the Emergency Department whose mother describes a four day history of malaise, low grade fevers and worsening cough. She has now developed stridor.

a)
What worrying clinical signs would indicate impending respiratory failure in this child? (4 marks)

1. .....
2. .....
3. .....
4. .....

b)
List 4 differential diagnosis of acute stridor in this child? (4 marks)

1. .....
2. .....
3. .....
4. .....

c)
Given the most common cause of acute stridor in children of this age accounts for 80% of cases, give 2 drugs that may help the condition? (2 marks)

1. .....
2. .....

d)

Unfortunately the child deteriorates and requires intubation, list 7 steps you would take to do this? (6 marks)

1. .....
2. .....
3. .....
4. .....
5. .....
6. .....
7. .....

e)

After the airway is secured, what steps should you take next? (3 marks)

1. .....
2. .....
3. .....

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	Answer	Mark	Guidance

a)	• Resp Rate >50/min
	• Reduced breath sounds or harsh wheeze
	• Increased effort:
	  ○ Head bobbing
	  ○ Suprasternal recession
	  ○ Nasal flaring
	  ○ Intercostal/subcostal recession
	• Posturing:
	  ○ Arching backwards, tripod
	• Severe stridor – both inspiratory and expiratory
	• Cyanosis on oxygen
	• Tachycardia
	• Sweating
	• Agitation
	• Confusion / reduced GCS
		1 mark for each (Max. 4)	

b)	• Croup (80%) • Acute epiglottis • Acute tonsillitis • Acute pharyngitis • Laryngotracheitis • Retropharyngeal abscess • Foreign body aspiration	1 mark for each (Max. 4)	
c)	• Oral / i.v. dexamethasone – dose not asked for but if given accept 0.15mg/kg po/iv (nebulised budesonide or prednisolone can also be used) • Nebulized adrenaline - 0.5ml/kg to a maximum of 5mls of 1:1000 adrenaline • Heliox	Max 2 marks	1 mark each for steroids and adrenaline. If Heliox used, only ½ mark as not widely available and main treatment is the first 2 drugs

d)	• Escorted to theatre/appropriate location by anaesthetist, • Presence of at least one consultant anaesthetist • Do not further distress child: minimum monitoring is oxygen saturation probe & end-tidal $C0_2$ • Induction: Sevoflurane with oxygen • Spontaneous ventilation maintained plus CPAP via T-piece • i.v. access as soon as patient loses consciousness • Muscle relaxant can be used – rocuronium with sugammadex available • Laryngoscopy performed either with muscle relaxant or when deep on volatile • Smaller tracheal tube should be expected as subglottic oedema likely • Consider ENT surgeon on standby for tracheostomy if failure to secure airway	1 mark for each (Max. 7)	
e)	• Sedate/paralyse • PICU transfer/Paeds retrieval • CXR • NG tube to deflate stomach • ABG • Antibiotics only if evidence of bacterial infection	1 mark for each (Max. 3)	

References

1) Advanced Life Support Group - Advanced Paediatric Life Support