CLINICAL SKILLS: MANAGEMENT OF ACUTE ASTHMA

An acute exacerbation of asthma is frightening for both the patient and the health care worker involved. This is one of the 'acute scenarios' that you should have a good grasp of before starting work. The BTS/SIGN guidelines (UK) are linked on the right and should be followed during clinical practice. We have digested these into exam-friendly steps below. Use these tips in conjunction with our general ABCDE proforma.

Wash hands / wear gloves

Assess for danger

Check patient response

Call for senior help if the patient is acutely unwell

Assess airway
Patent? Able to talk in full sentences?
Look, listen and feel for breath sounds

If there is no patent airway, if there are no signs of life or breath, then ensure that an **'arrest call'** is put out. Call 2222 and state your name, your ward location and the event.

Assess breathing
Colour - is the patient cyanosed?
Respiratory rate - is the patient tachypnoeac or cyanosed?
Are they gasping for air, pursed lips, nasal flaring?
Are they using accessory muscles?
Listen to breath sounds with stethoscope on front and back: wheeze? "Silent Chest"?
Measure: pulse oximetry
Measure: conduct an ABG
Measure: peak flow
Order: CXR, sputum sample
Assess severity of attack (see below)

Treat - prescribe medication:

Give OXYGEN, 85%, 10-15 L/minute to aim saturations of 94-98%

Salbutamol 5mg nebulised WITH OXYGEN, repeat every 15 minutes if no improvement

Ipratropium Bromide 0.5mg nebulised WITH OXYGEN

Prednisolone 30mg-50mg PO (if cannot swallow use 100mg-200mg IV Hydrocortisone)

If patient does not respond or if "Life Threatening" features consider

- Magnesium Sulphate 1.2-2mg IV over 20 minutes
- Urgent ITU outreach referral for consideration of intubation
- Salbutamol or Aminophylline infusion could be considered in ITU

Assess Circulation

Colour

Ankle oedema

Heart sounds

Measure: capillary refill time

Measure: blood pressure

Measure: heart rate

Measure: temperature (are they septic?)

Measure: urine output

Insert 2 wide bore cannulae

Take bloods: FBC, CRP, U&Es, Blood Cultures if septic

Consider giving IV fluids

Consider antibiotics if any indicators of sepsis

Assess disability

AVPU score

Blood sugar

Expose

Examine your patient - what precipitated this exacerbation?

Do they have a respiratory tract infection?

Have they been in trauma?

Assessing Severity of Asthma

Severity	Classify according to most severe feature
Near Fatal	Raised PaCO2, and/or requiring intubation and mechanical ventilation with raised inflation pressures
Life Threatening	PEFR <33% of best/predicted Oxygen saturations <92% PaO2 <8kPa Normal PaCO2 (4.6-6kPa) Silent chest Cyanosis Poor respiratory effort (tiring) Arrhythmia Exhaustion/decreased GCS pH <7.35
Acute Severe	Unable to complete sentences Respiratory rate >25/min Heart rate >110/min PEFR <50% of best or predicted
Moderate	Symptoms worse than baseline PEFR >50-75% of best or predicted No features of Acute Severe/Life Threatening/Near Fatal