Shortness of Breath – Adult Emergency Nurse Protocol SESLHD

**Aim:**
- Early identification and treatment of life threatening causes of shortness of breath and escalation of care for patients at risk.
- Early initiation of treatment / clinical care and symptom management within benchmark time.

**Assessment Criteria:** On assessment the patient should have increased shortness of breath plus one or more of the following signs / symptoms:

- Patent airway
- Mild dyspnoea
- SpO$_2$ > 95%
- Mild use of accessory muscles
- Talking in short sentences
- Wheeze / coughing

**Escalation Criteria:** Immediate life-threatening presentations that require escalation and referral to a Senior Medical Officer (SMO):

- Severe asthma / COPD
- Foreign body / aspiration
- Massive pulmonary emboli
- Tension Pneumothorax
- Acute pulmonary oedema
- Anaphylaxis
- Trauma Criteria*
- Acute respiratory failure
- Sepsis Pathway Criteria*
- Trauma Criteria*
- Acute respiratory failure
- Sepsis Pathway Criteria*

**Primary Survey:**
- Airway: patency
- Breathing: resp rate, accessory muscle use, air entry, SpO$_2$
- Circulation: perfusion, BP, heart rate, temperature
- Disability: GCS, pupils, limb strength

**Notify CNUM and SMO if any of the following red flags is identified from Primary Survey and Between the Flags criteria:**

- Airway – at risk
- Partial / full obstruction
- Disability – decreased LOC
- GCS ≤ 14 or a fall in GCS by 2 points

**History:**
- Presenting complaint
- Allergies
- Medications: and any recent change to medications
- Past medical and past surgical history relevant
- Last ate / drank and last menstrual period (LMP)
- Events and environment leading to presentation
- Pain Assessment / Score: PQRST (Palliating / provoking factors, Quality, Region / radiation, Severity, Time onset)
- Associated signs / symptoms: e.g. dizziness, chest pain, syncope, fevers, cough
- History: family, trauma and travel

**Systems Assessment:**
- **Focused Respiratory Assessment:**
  - **Inspection:** rate and rhythm of breathing, quality and work of breathing, level of consciousness, chest wall abnormalities, face / neck swelling
  - **Palpation:** assess degree and location of tenderness, note any restriction to chest expansion, is the trachea midline?
  - **Auscultation:** listen for bilateral air entry, wheezes (expiratory), crackles (inspiratory).
  - **Percussion:** observe for dullness or hyper-resonance on percussion.

**Notify CNUM and Senior Medical Officer (SMO) if any of following red flags is identified from History or Systems Assessment:**

- Sudden acute onset
- Cyanosis
- Decreased breath sounds
- Elderly > 60 years
- Recent travel / infectious

**Investigations / Diagnostics:**

**Bedside:**
- BGL: If < 3mmol/L or > 20mmol/L notify SMO
- ECG: [as indicated] look for Arrhythmia , AMI
- Urinalysis / MSU: if urinary symptoms present

**Laboratory / Radiology:**
- Pathology: Refer to local nurse initiated STOP
  - FBC, UEC, LFTs (suspected Pneumonia)
  - FBC, UEC, LFTs & Troponin (suspected Pul Oedema)
Shortness of Breath

**Supportive Treatment:**

- Nil By Mouth (NBM)
- Monitor vital signs as clinically indicated (BP, HR, T, RR, SpO₂)
- Monitor neurological status GCS as clinically indicated
- Monitor pain assessment / score
- Fluid Balance Chart
- NIV observation chart if required
- Consider [devices – IDC / Nasogastric tube]
- Suction oropharynx / mouthcare
- PPE droplet / airborne precautions

**Practice Tips / Hints:**

- **In life threatening presentations, call for help, consider early intubation.**
- Maintain close observation and provide reassurance - breathless patients are usually anxious which further increases myocardium force and contraction and oxygen demand.
- Isolate patients screened as infectious preferably in negative pressure rooms, the use of PPE including full droplet / airborne precautions is necessary when attending to potentially infectious patients.
- Consider application of BIPAP / CPAP to decreased the work of breathing and improve gas exchange in the management of acute respiratory failure.
- Oxygen therapy for most patients with COPD will not produce significant CO₂ retention, oxygen delivery should provide minimal saturations in most cases of 90% corresponding with a PaO₂ of 80-70mmHg.
- The use of a spacer and inhaler provides equivalent bronchodilator effect to that achieved by nebulization.
- Inhalers with spacers should be used over nebulisers in the infectious patient because of their ability to distribute infectious particles.
- Nebulisers via a mouth T piece is preferred over a mask to prevent adverse effects around corneal deposition.
- Patients should be advised to rinse their mouth out after inhaling corticosteroid to prevent oral thrush.
- Consider oral opiates to relieve the sensation of breathlessness without causing respiratory depression.
- Consider anxiolytics for acutely anxious patients.

**Further Reading / References:**


**Acknowledgements:** SESLHD Adult Emergency Nurse Protocols were developed & adapted with permission from:

- Murphy, M (2007) Emergency Department Toolkits. Westmead Hospital, SWAHS
- Hodge, A (2011) Emergency Department, Clinical Pathways. Prince of Wales Hospital SESLHD.

**Revision and Approval History**

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<tr>
<th>Date</th>
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<tr>
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