Respiratory Examination

# General Exam

Greet the patient and introduce yourself.

Explain the procedure and gain an informed consent.

The patient should be examined propped up at 45 degrees in bed, and exposed adequately.

### Patient wellbeing and nutritional status

Stable, alert, comfortable, breathless, cachexic; cancer, emphysema, Cushingoid; steroid use.

### Around the bed

Oxygen, medication (metered dose inhalers, nebulisers), sputum pots (look at the sputum), cigarettes, chest tube and UWSD, IV lines/fluids.

### General Breathing

Use of accessory muscles (COPD, pleural effusion, pneumothorax, severe asthma), puffing through pursed lips (prevents bronchial wall collapse by keeping lung pressure high in severe airway obstruction/emphysema), Kausmal breathing (dKA).

### Noises

Patients’ speech (normal, obstruction; recurrent nerve palsy), stridor (large airway obstruction e.g. mediastinal masses, bronchial carcinoma, retrosternal thyroid), wheeze, cough (dry/bovine/productive), prolonged expiratory phase (asthma, COPD), clicks (bronchiectasis), gurgling (airway secretions).

### Hands

Fine tremor (Beta-2 agonists use), sweaty, warm and clammy (CO2 retention), palmar pallor, tar stains (smoker), peripheral cyanosis, capillary refill (>2s in hypoperfusion), muscle wasting (Pancoast tumor)

Flapping tremors; CO2 retention in Type 2 respiratory failure. Other causes are: Hepatic failure, renal failure, cardiac failure, respiratory failure, electrolyte abnormalities (hypoglycemia, hypokalemia, hypomagnesaemia), drug intoxication (alcohol, phenytoin).

Nails - Clubbing

* Respiratory: Carcinoma, fibrosing alveolitis, chronic suppurative lung disease (e.g. empyema, lung abscess, bronchiectasis, cystic fibrosis), TB/Sarcoidosis
* Cardiac: Infective endocarditis, cyanotic heart disease, atrial myxoma
* Hepatic: Cirrhosis
* Gastrointestinal: Ulcerative colitis, Crohn’s disease, Coeliac disease

### Pulse and Respiratory Rate

Pulse: Rate and rhythm, tachycardia (may indicate hypoxia in severe asthma or COPD, PE, Infection

Bounding pulse: CO2 Retention

Respiratory rate (while patient thinks you’re feeling the pulse): Tachypnea (fever: severe lung disease, hyperventilation), bradypnea (sedation)

### Lymph Nodes

Palpate the epitrochlear nodes and axillary nodes (apical, medial, anterior, lateral and posterior)

### Head and Neck

Face: Cushingoid; steroid use, Pethoric; CO2 retention, Telangiectasia/microstomia; systemic sclerosis, Butterfly rash; SLE, Lupus pernio; sarcoid lupus vulgaris, TB diaphoresis

### Eyes

Conjunctival pallor (anemia of chronic disease)

Horner’s syndrome; ptosis, miosis (constricted pupil due to invasion of sympathetic chain by Pancoast’s apical tumor and ipsilateral hand wasting) and anhidrosis

### Mouth

Central cyanosis under tongue; hypoxia, oral candidiasis from steroid inhaler use, lip pursing

### Neck

JVP height increased in cor pulmonale, tracheal tug, tracheal position

* Normal: Either central or slightly to the right
* Pushed to the contralateral side: Pneumothorax, pleural effusion, large mass
* Pulled to the ipsilateral side: lung fibrosis, lung collapse, lung agenesis, whole lung atelectasis, pneumonectomy

Notch-Cricoid distance: < 3 fingers = lung hyperinflation

Cervical lymphadenopathy

### Pedal Edema

Unilateral/bilateral, pitting/non-pitting

**Note**

**Signs of Respiratory distress include:**

Alar flaring, pursed lips, cyanosis, labored breathing, intercostal recession, accessory respiratory muscle use (abdominal muscles, scalene, SCM, shoulder girdle muscles, sacrospinalis, serratus muscles), suprasternal and supraclavicular recession, increased respiratory rate, increased heart rate, wheezing, grunting, stridor, tracheal tug.