



# RESPIRATORY ASSESSMENT

DND Primary Care Paramedicine

Module: 03

Section: 03

- Respiratory Complaints account for over 15% of all emergency calls in NS (Breathing problems and respiratory arrest)
- Remember respiratory complaints may be associated with exposure to a variety of toxic environments
  - Scene assessment is a key factor

- Scene assessment
  - Safety
  - BSI
  - Identify rescue environments having decreased oxygen levels
    - Gases and other chemical or biological agents
  - Clues to patient information

# General Impression of the Patient



- Position
- Color
- Mental status
- Ability to speak
- Respiratory effort

- Major focus is the recognition of life-threatening conditions (ABC's)
- Signs of life-threatening respiratory distress in adults include:
  - ALOC
  - Severe cyanosis
  - Absent breath sounds
  - Audible stridor
  - One or two word dyspnea
  - Tachycardia
  - Pallor or diaphoresis
  - AMU (including retractions)
- What are some other signs of respiratory distress?



- Nasal flaring
- Intercostal retraction
- Use of accessory muscles
- Cyanosis
- Pursed lips
- Tracheal tugging



- Noisy breathing means partial airway obstruction
- Obstructed breathing is not always noisy
- Brain can only survive minutes in asphyxia
- Ventilation is useless if the airway is blocked
- A patent airway is useless if the patient is apneic
- Act on airway obstruction

- Signs of life-threatening problems
  - Alterations in mental status
  - Severe central cyanosis, pallor, or diaphoresis
  - Absent or abnormal breath sounds
  - Speaking limited to 1–2 words
  - Tachycardia
  - Use of accessory muscles or presence of retractions



- SAMPLE History
- OPQRST History
  - Paroxysmal nocturnal dyspnea and orthopnea
  - Coughing and hemoptysis
  - Associated chest pain
  - Smoking history or exposure to secondary smoke
  - Medication history (compliance, rescue meds?)
- Similar Past Episodes

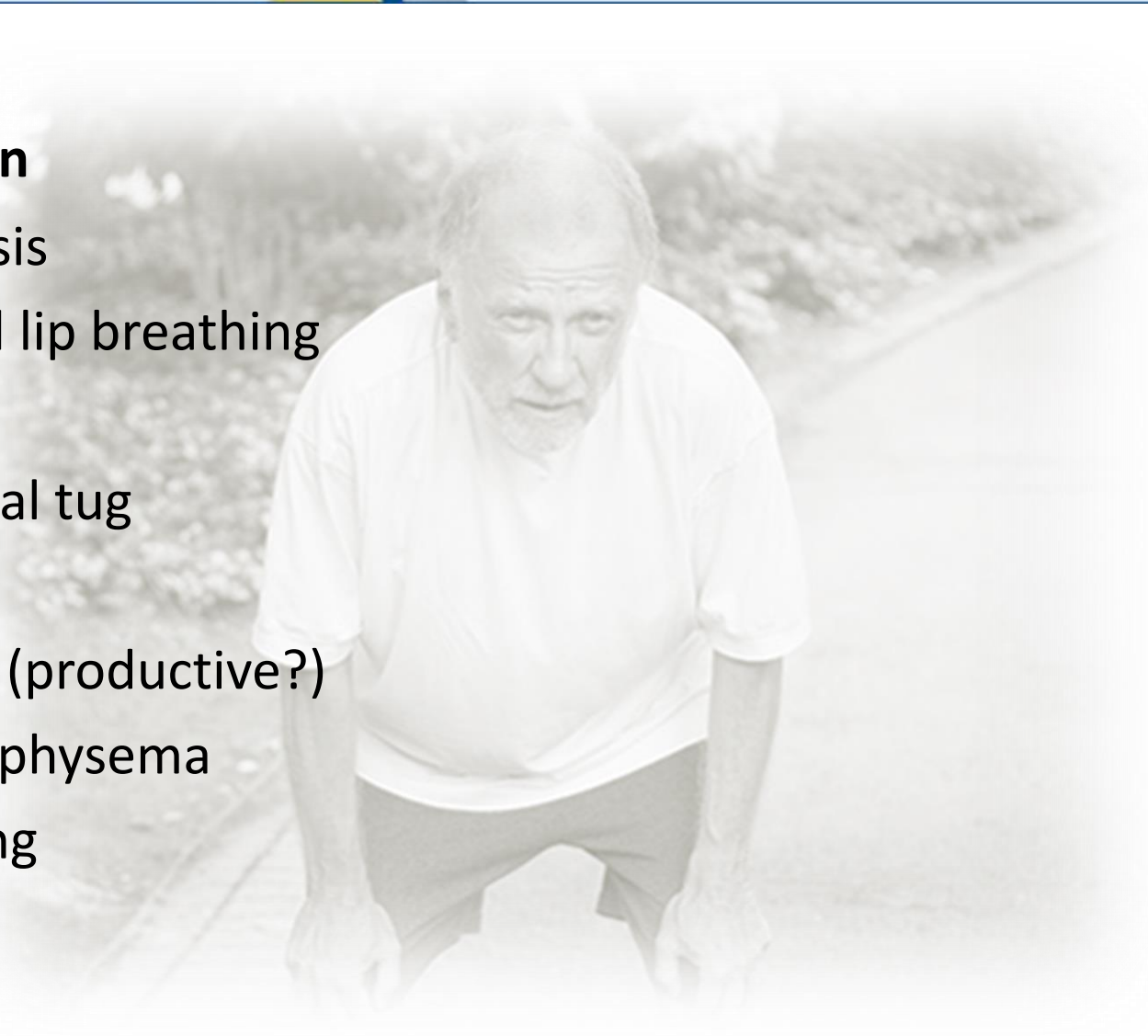
- If a new condition, or undiagnosed you should decide if the problem is primarily related to
  - Ventilation
  - Diffusion
  - Perfusion

- Pulse rate
  - Tachycardia
    - Sign of hypoxemia, sympathomimetic
  - Bradycardia
    - Severe hypoxemia and imminent arrest
    - First sign of hypoxia in neonates
- BP
  - Hypertension may be a result of the sympathomimetic medications
  - Pulsus paradoxus?

- RR
  - Not always accurate indicator of respiratory status
  - Trends are important
    - Assume as elevated rate is caused by hypoxia
    - Assume a slow rate is impending respiratory arrest
    - Slowing rate with unimproved condition suggests exhaustion
  - Abnormal respiratory patterns may be present
  - Audible noises

## Inspection

- Cyanosis
- Pursed lip breathing
- AMU
- Tracheal tug
- JVD
- Cough (productive?)
- SQ Emphysema
- Swelling

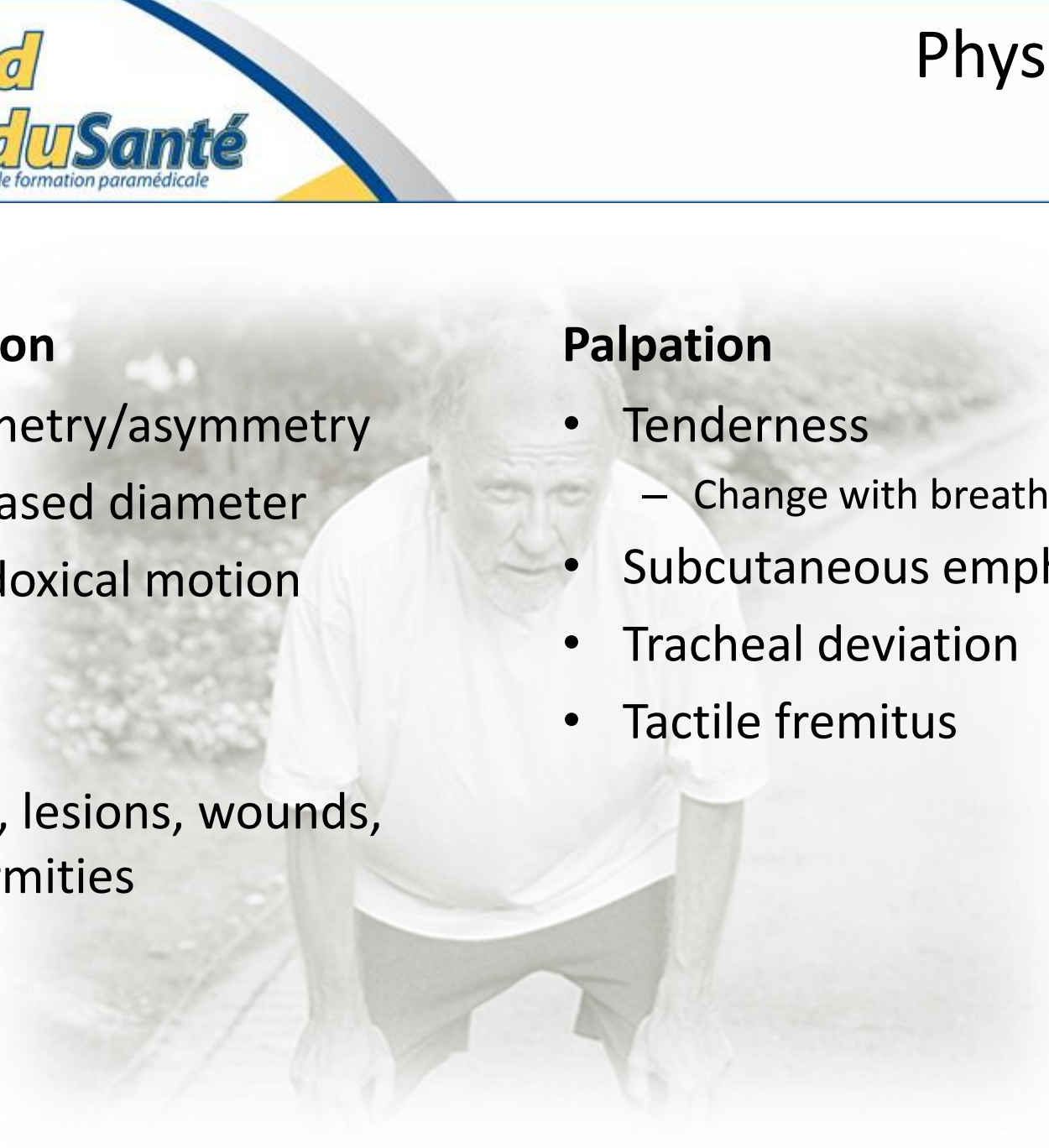


## Inspection

- Symmetry/asymmetry
- Increased diameter
- Paradoxical motion
- AMU
- Pain?
- Scars, lesions, wounds, deformities

## Palpation

- Tenderness
  - Change with breath?
- Subcutaneous emphysema
- Tracheal deviation
- Tactile fremitus



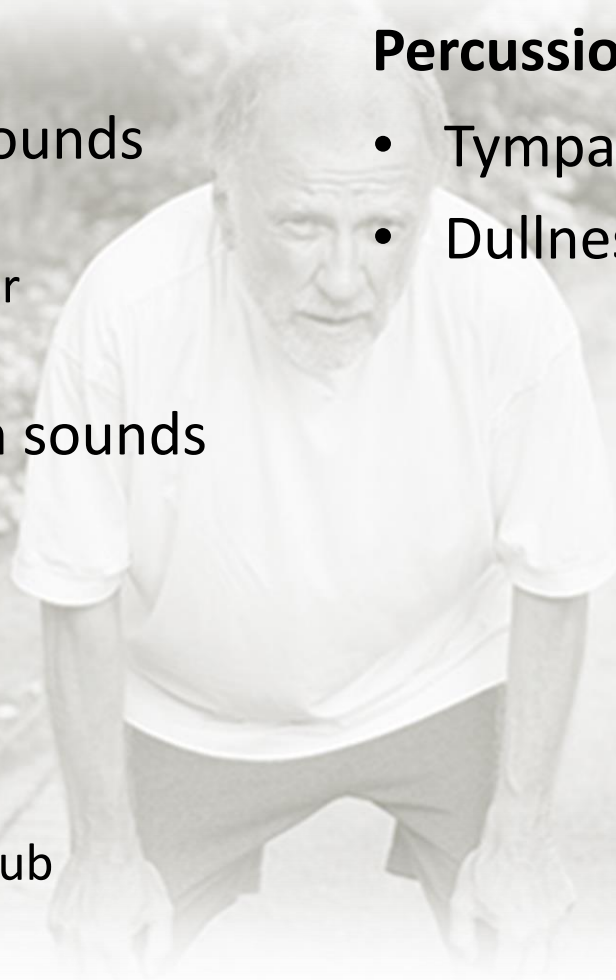


## Auscultation

- Normal breath sounds
  - Bronchial
  - Bronchovesicular
  - Vesicular
- Abnormal breath sounds
  - Snoring
  - Stridor
  - Wheezing
  - Rhonchi
  - Crackles
  - Pleural friction rub

## Percussion

- Tympanic (Hyperresonant)
- Dullness



- Abdomen
  - Belly breathing?
  - Pain?
  - Distention

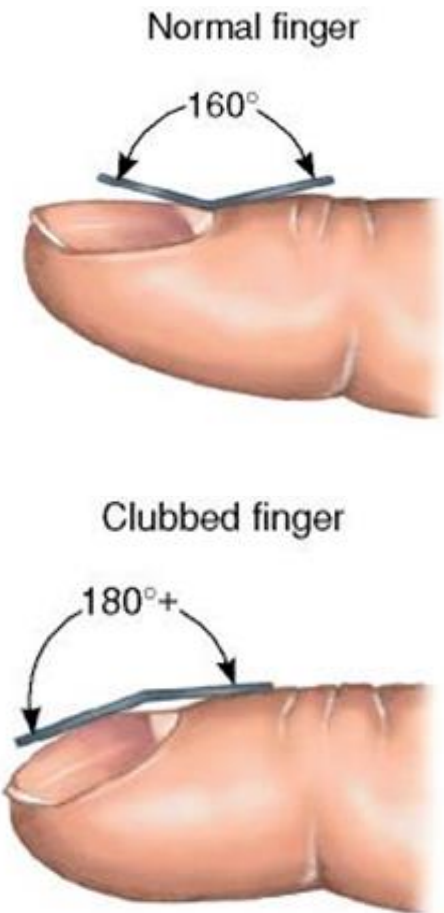
Ascites



- Extremities
  - Peripheral cyanosis
  - Clubbing (from chronic hypoxemia)
  - Carpopedal spasm (from hypercarbia)
  - Edema (pitting?)
  - Skin turgor (tenting?)



- Peripheral cyanosis
- Swelling and redness, indicative of a venous clot
- Finger clubbing, which indicates chronic hypoxia
- Carpopedal spasm (from hypercarbia)
- Edema (pitting?)
- Skin turgor (tenting?)



- Pulse oximetry
- Monitor
- BP
- Glucose
- If intubated
  - Capnography
- Record trends