RSPT 1101
Cardiopulmonary Assessment

• Role of RT has changed dramatically in last decade
  – Originally - equipment techs
  – Today - called upon to aid Dr. in “diagnostic reasoning”
    • communication, selection, interpretation, formulation, evaluation, testing, therapy

• You may see patient before Dr.
• You may spend more time with patient than nurse
• You know the “right” questions to ask to zero in on problem
• Your role in patient assessment is extremely important & requires training, practice
1st Step - Pre-Introductory Phase

• Review of patient’s chart
  – Name
  – Age
  – Gender
  – C/O
  – Hx of present illness
  – Lab values
  – Doctor’s orders

2nd Step - Introductory Phase

• Enter the patient’s room
  – Introduce self in patient’s “social space”

<table>
<thead>
<tr>
<th>Social Space</th>
<th>Personal Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can see “big picture”</td>
<td>Do not enter too quickly</td>
</tr>
<tr>
<td>No personal questions</td>
<td>Establish rapport 1st</td>
</tr>
<tr>
<td></td>
<td>Can ask personal questions</td>
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</tbody>
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Introductory Phase

• Introduce self
• Greet patient by formal name
• Give brief description of purpose of your visit
• Must establish trust - at some point you must enter “personal space”
  – Ask permission (communicates respect)
  – Minimal or no eye contact
  – Brief commands
  – All items in room temporarily “belong to patient”
Introductory Phase

- **Confirm patient's identification**
  - Read ID bracelet! Don’t just ask patient's name
  - Remember to ask permission
    - Conveys respect for privacy & that you are committed to quality patient care
  - May be a 2-step approach:
    - Walk in --“Good morning. Are you Mr. Carter?”
    - Check arm band

Introductory Phase

- Be warm, friendly, professional
- Avoid overly friendly, jovial, exuberant
- Watch body language

Introductory Phase

- Summary
  - Don’t invade personal space too early
  - Acknowledge patient’s “territory”
  - Introduce self and ID patient
  - Face patient squarely
  - Use eye contact appropriately
  - Maintain open, relaxed posture
  - Be an active listener
  - If you feel you must touch patient
    - Assure that patient is receptive
    - Hands, arms, shoulder
2nd Step - Initial Assessment

- May overlap 1st step - you can begin visual inspection during intro
- Note:
  - General appearance
  - Attitudes, responses to questions
  - Brief physical assessment
    - SpO2
    - HR
    - RR
    - BS
- Remember to do what????

3rd Step - Treatment & Monitoring

- Continual Assessment
- Watch for side-effects
- Watch for positive or beneficial results

4th Step - Follow-Up

- Let patient know when you will be back and how to contact you, if needed
- Make him/her as comfortable as possible
- Ask if you can get him/her anything
Cardiopulmonary Signs & Symptoms

Cough

- 1 of the most common symptoms in patients with CP disease
- = powerful airway protective reflexes
- Produced by stimulation of those receptors
  - Inflammatory
  - Mechanical
  - Chemical
  - Thermal
- May be voluntary or involuntary
Cough

• Described as
  – Effective, strong vs. inadequate, weak
  – Productive or dry
  – Barking, brassy, hoarse, wheezy, hacking

Sputum Production

• Sputum = substance expelled from TB tree, pharynx, mouth, sinuses, nose
• Phlegm = secretions from TB tree
• Made of mucus, cellular debris, microorganisms, blood, pus, foreign particles
• Normal production = <100 ml/day

Sputum Production - Amount

• Described as scant - to – copious
• Thin, thick, viscous, tenacious, frothy
• Note and chart amount, color, consistency, odor (integral part of diagnostic puzzle)
Shortness of Breath (SOB)

• = dyspnea
  – “dys” -
  – “pnea” -
• Normally you should not be aware of your breathing
• Indicates resp or cardiac disease
• Interferes with work, exercise, ADL
• Frequently is the reason patient goes to Dr.
• Can be slight to severe distress

Shortness of Breath

• Difficult to assess because is a “symptom”
  – Sign = objective, numbers, observations
  – Symptom = subjective, something the patient tells you
    • “short of breath”
    • “difficult to breathe”
    • “can’t catch my breath”
    • “short-winded”

Shortness of Breath

Always take complaints of dyspnea seriously!
Chest Pain

- Can be non-cardiac
  - Inflammatory disorders
  - Musculoskeletal
  - Trauma
  - Drug therapy
  - Indigestion
  - Anxiety
- Can be stabbing - to - vague
- Can be “referred”

Chest Pain

Investigate all chest pain

Dizziness, Syncope

- = temporary loss of consciousness
- Caused by reduced blood flow &/or O2 to the brain
- Can be pulmonary or non-pulmonary
Edema

• = soft tissue swelling due to abnormal accumulation of fluid
• May be generalized, localized or dependent
• May be limited to 1 organ

Fever, Chills, Night Sweats

• Affected by age, exercise, excitement, sudden changes in environmental temp, route of measurement
• Fever (hyperthermia, pyrexia) = temp above normal

Fever, Chills, Night Sweats

• Is a nonspecific symptom caused by a multitude of origins
  – **infection**

• Is a concern for 2 reasons
  1. Significant disease is present
  2. Increases metabolic rate which increases O2 requirement and CO2 production
Headache, Altered Mental Status

- Decreased O2 &/or increased CO2 in blood → headache
  - Decreased O2 to systemic brain vasodilation
  - Cerebral hypoxia vasodilation

Headache, Altered Mental Status

- If persists - changes in mental status
  - Thought processes & memory deterioration
  - Mind wanders
  - Easily distracted
  - Tremors
  - Uncontrolled movements
  - Hallucinations
  - Nightmares
  - Drowsiness, disorientation, coma → death

Headache, Altered Mental Status

- When these changes occur suddenly = acute problem
- Can be result of many factors -- **but could be hypoxia, hypercarbia**
- Always think this and rule out