- homeopathy: coffea 12 ch bid in evening spaced 3 hrs apart before bedtime, allow 4 days to assess, increase to 30 ch, if needed
- massages
- relaxation therapies:
  - progressive muscle relaxation
  - self hypnosis
  - focused muscle relaxation
- therapeutic touch
- warm milk, Ovaltine™

CARDIO-RESPIRATORY PROBLEMS

CHEST PAIN

PRESENTATIONS

May occur at rest, on movement, on exertion, on inspiration. May be generalized or localized and may be specific to one or more dermatomes.

CAUSES

Infectious:
(including pericarditis, pleurisy, pneumonia)
- atypical mycobacterium (MAC)
- CMV
- fungi
- herpes zoster
- pneumocystis carinii
- pyogenic bacteria
- TB

Malignant:
- Kaposi's sarcoma
- lymphoma

Other:
- costochondritis
- ischemia
- musculoskeletal
- pneumothorax
- pulmonary embolism
- trauma

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

- distinguish between non-esophageal and esophageal pain (see Odynophagia)
- pain on inspiration, exertion may indicate rib subluxation

PROBLEMS	INTERVENTIONS
chest wall inflammation, trauma, pericarditis, pleurisy	• provide stepwise analgesia, especially NSAID's (see Pain) • if costochondritis, consider local steroid/xylocaine injections • for extreme, chest wall pain consider nerve block
herpes zoster	• acute - provide stepwise analgesia (see Pain) • chronic - see Neuropathic Pain
ischemia	• use appropriate cardiac medications - nitroglycerin, nitrates, calcium channel blockers, beta blockers • provide stepwise analgesia (see Pain)
pneumothorax	• manage acutely with chest tube and suction, if appropriate • provide stepwise analgesia (see Pain)

COMPLEMENTARY THERAPIES

- chiropractic assessment and treatment
- TENS
- physiotherapy
- therapeutic touch
- acupuncture for musculo-skeletal pain

COUGH

PRESENTATIONS

May include:

- areas of pulmonary dullness
- crackles
- stridor
- gagging, retching
- hemoptysis
- bronchospasm (wheezing)
- intercostal indrawing
- tachypnea
- cough induced nausea, vomiting

CAUSES

Pulmonary:

- bronchospasm
- embolism
- effusions
- Kaposi's sarcoma
- obstruction
- opportunistic infections
- pneumothorax

Cardiac:

- CHF with pulmonary edema
- ischemia

Other:

- allergy
- chemical and mechanical irritants
- psychological, i.e. anxiety

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

- distinguish between productive and non-productive cough
- reduce allergans, irritants, i.e. smoking
- elevate to semi-sitting position
- provide abdominal splints for persistent coughing episodes
- manage associated bronchospasm (see Dyspnea)

PROBLEMS	INTERVENTIONS
cough	• suppress with: – dextromethorphan hydrobromide 15–45 mg po q4h prn – opioids: • codeine 15–60 mg po q4h prn (even when taking another opioid for pain management) • hydrocodone 5-10 mg po q4-6h prn • hydrocodone and phenyltoloxamine complex (Tussionex®) 5 mls or 1 tablet q8–12h prn • morphine 5–20 mg po q4h prn (may be increased further) • normethadone and hydroxephedrine compound (Cophylac®) 15 drops po bid prn – Nabilone 1-2 mg po bid-tid-qid (max 6 mg/24 hrs) prn
hyperactive gag reflex	• nebulized lidocaine 5 mls of 2% solution (100 mg) q3-4h prn • reduce associated anxiety (see Anxiety)

increased quantity or difficulty clearing airway secretions	• maintain adequate hydration • keep mucous membranes moist • increase humidity in the room (be careful not to increase risk of respiratory infections) • try nebulized saline to loosen thick secretions • postural drainage • massage/respiratory physiotherapy • oropharyngeal or nasopharyngeal suction only if absolutely necessary (very stimulating) – scopolamine 0.3–0.6 mg sc q4–8h prn or scopolamine (Transderm-V®), patch 1-2 behind alternating ears q72h – glycopyrrolate (Robinul®), 0.1-0.4 mg im, iv q4-6h prn (non-sedating)

COMPLEMENTARY THERAPIES

- acupuncture
- aromatherapy - eucalyptus, pine, benzoin oils to chest
- massage, gentle clapping on back to move sputum

DYSPNEA, RESPIRATORY DISTRESS

PRESENTATIONS

Person may feel short of breath before there are objective signs which may include:

- areas of pulmonary dullness
- crackles
- inability to clear secretions
- stridor
- bronchospasm (wheezing)
- cyanosis, central or peripheral
- intercostal indrawing
- tachypnea

CAUSES

Pulmonary

- asthma
- effusions
- embolism
- hypertension
- infections:
  - opportunistic
  - other
- Kaposi's sarcoma
- obstruction
- pneumothorax

Cardiac:

- CHF with pulmonary edema
- ischemia

Other

- anemia
- ascites
- fatigue
- neuromuscular:
  - myelopathy
- psychological:
  - anxiety
  - depression

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

- respond quickly
- elevate head of bed
- keep air moving using fans, open windows (avoid excessive cooling)
- reduce environmental irritants, i.e. smoking
- minimize number of people in the room
- teach and support family
- manage associated anxiety (see Anxiety)

PROBLEMS	INTERVENTIONS
bronchospasm	• salbutamol 2–3 puffs q4-8h (with aerochamber) or 2.5–5.0 mg diluted to 4.0 mls with saline up to q4h via nebulizer • ipratropium bromide (Atrovent®) 2-3 puffs q 4-8 h prn • steroids: – prednisone 10–60 mg po od – dexamethasone 1–8 mg po, iv, im, sc q6h • racemic epinephrine 2–3 puffs q4–6h
hypoxia	• use oxygen judiciously. It is not essential to reduce the sense of being short of breath, and may not be effective by itself • compressed air may be as effective as oxygen • oxygen only indicated if % saturation <90% • if oxygen is used, exercise clinical judgment. Measure % oxygen saturation, not arterial blood gases, unless absolutely necessary • monitor % oxygen saturation to establish ongoing need for oxygen therapy
obstruction	• steroids: – prednisone 10–60 mg po od – dexamethasone 1–8 mg po, iv, im, sc q6h • racemic epinephrine 2–3 puffs q4–6h
pleural effusion	• thoracentesis • for recurrent effusions: – talc or tetracycline poudrage/pleuradesis – insert Tenchkoff™ catheter for repeat drainage
pulmonary edema	• careful salt and fluid management • appropriate cardiac medications • diuretics: – furosemide 20–240 mg po, iv prn – ethacrynic acid 50–100 mg po, iv od-bid • nitrates or nitro paste to enhance peripheral venous dilation
respiratory distress	• for opioid naive: – morphine 5–15 mg po, pr, sl, sc, im, iv q1–4h prn or – hydromorphone 1–3 mg po, pr, sl, sc, im, iv q1–4h prn • for persons already taking opioids: – increase dose of same opioid by 25–100% q4h. • nebulized opioids may be helpful: – preservative free parenteral solutions of morphine 10–40 mg or hydromorphone 2–20 mg diluted to 3-4 mls with saline q4h may be very effective (type of nebulizer may improve delivery) • for associated anxiety: – benzodiazepines (always adjust based on response to previous doses): • lorazepam 0.5–2.0 po, sl, buccal mucosal q1h prn • diazepam 5–10 mg po qid prn • clonazepan 0.25-2.0 mg po q12h prn • midazolam 1–5 mg sc q3h prn or 0.5-2.0 mg q1h sc infusion – nabilone 1–2 mg po bid-tid prn • for extreme distress: – use doses as above, but deliver parenterally only, or – a combination of morphine (doses as above), scopolamine 0.3–0.6 mg in the same syringe sc as a stat dose may also be very effective. May repeat in 5–10 minutes – midazolam 5-10 mg sc, repeat q10 min until settled

secretions, increased quantity or difficulty clearing	• to reduce quantity of secretions: – scopolamine 0.3–0.6 mg sc q4–8h prn or scopolamine (Transderm-V®) patch 1-2 behind alternating ears q72h – glycopyrrolate (Robinul®) 0.1–0.4 mg im, iv q4–6h prn (non-sedating) • maintain adequate hydration • keep mucous membranes moist • increase humidity in the room (be careful not to increase risk of respiratory infections) • try nebulized saline to loosen thick secretions • postural drainage • massage, respiratory physiotherapy • oropharyngeal or nasopharyngeal suction only if absolutely necessary (very stimulating)

LAST HOURS OF LIVING	INTERVENTIONS
respiratory failure	• a significant change in the person's breathing pattern, i.e. Cheyne-Stokes breathing, or short, shallow respirations, is one of the cardinal signs that death is occurring • focus on treating the sense of shortness of breath, clearing or reducing secretions while continuing to treat underlying causes, if possible • oxygen may prolong death rather than improve quality of life, and may not be appropriate. Use it judiciously • provide ongoing teaching or support for those at the bedside, particularly if the dyspnea is perceived as being distressing

COMPLEMENTARY THERAPIES

- acupuncture
- aromatherapy - eucalyptus, pine, benzoin oils to chest
- therapeutic touch

HICCUPS

PRESENTATIONS

May be very distressing, especially if ongoing or out of control.

CAUSES

- cerebral tumour
- gastric distension
- renal insufficiency
- diaphragmatic irritation/ irritability
- phrenic nerve irritation

APPROACHES AND INTERVENTIONS

Examination, investigation and treatment of underlying causes should be appropriate to the presentation, stage and context of the person and illness.

- reduce or discontinue medications that may be causing CNS excitation, i.e. opioids

PROBLEMS/APPROACHES	INTERVENTIONS
central suppression	• chlorpromazine 25-50 mg po, pr, im, iv q4-6h prn • for cerebral tumours may also try: – phenytoin 200-300 mg po, iv od – carbamazepine 100-200 mg po bid-tid – valproic acid 250 mg po bid-qid

increase pCO2	• 5% CO_2 by face mask at bedside • breath holding • re-breathing, i.e. supervised use of paper bag
pharyngeal stimulation	• granulated sugar with lemon juice • nasal catheter • stimulation of pharynx with finger and cotton ball
gastric distention	• anti-flatulants • antacids, standard doses q2h prn • naso-gastric tube suction • peristaltic stimulation to facilitate gastric emptying, including: – metoclopramide 10 mg iv stat, then 10 mg po q6h prn – mint water, peppermint tea
other medications	• nifedipine 10–20 mg po, sl q8h or 30–60 mg po od (sustained release) (observe for hypo-tension) • baclofen 5–20 mg po bid-tid • steroids: – prednisone 10-40 mg po od – dexamethasone 2-8 mg po, iv, im, sc q6h

COMPLEMENTARY THERAPIES

- acupuncture
- chiropractic
  - manipulation of C 3, 4, 5
  - manual diaphragm release
- therapeutic touch

HEAD AND NECK PROBLEMS

HEADACHE

Meningismus = stiff neck due to meningeal irritation/pain.

PRESENTATIONS

Pain occurs in one or more locations across the head, including the sinuses. May radiate into ear(s), eye(s), mouth, neck. May change with movement and be associated with meningismus.

CAUSES

Infectious:
- encephalitis:
  - cryptococcal
  - HIV
  - herpetic
- herpes zoster
- meningitis (all causes)
- sinusitis
- toxoplasmosis

Malignant:
- lymphoma

Other:
- torticollis/muscle spasm
- cervical spondylosis
- diagnostic test, i.e. lumbar puncture
- intoxication or substance withdrawal, i.e. alcohol, caffeine
- medications
- migraine
- tension
- therapeutic interventions