Pathology and Nutrition

Nervous System disorders
Respiratory Disorders

Respiratory System

Chronic Obstructive Pulmonary Diseases: COPD

There are 3:

• Asthma
• Chronic bronchitis
• Emphysema

Asthma (a COPD)

• chronic, intermittent, inflammation and constriction of the airways; induced suddenly by a stressor (bringing about an acute attack)
• triggered by stressors: allergen, emotional, extreme temperature change

Who gets it:
Most often diagnosed in childhood

Asthma
Emphysema (a COPD)

Emphysema
- progressively degenerative
- alveoli (air sacs) become permanently dilated; trapped air
- supplemental oxygen often required to live

Presentation: barrel-chested, dyspnea, wheezing, fatigue, pink skin, weight loss, finger clubbing

Risk factors: long-term cigarette smoke exposure, OR heredity (uncommon)

Chronic Bronchitis (a COPD)

- Etiology/risk factor: smoking
- Clinical presentation: productive cough (sputum clear, yellow or greenish) a.k.a ‘smoker’s cough’, shortness of breath, chest discomfort, cyanosis (blue skin)

Note: NOT characterized by infection but sufferers are at higher risk of lung infection

Acute Respiratory Infections

Upper Respiratory Tract
- sinusitis
- otitis
- tonsillitis
- pharyngitis
- laryngitis

Lower Respiratory Tract
- Acute bronchitis
- pneumonia

Pneumonia: Risk Factors

- upper respiratory tract infection (URTI)
- infancy
- elderly
- HIV+/AIDS
- asthma
- smoking
- hip fracture (due to horizontal convalescence)
- use of corticosteroids
- hospitalization
- drug and alcohol abuse

Pneumonia: a relatively common infection of the lower respiratory tract.
### Clinical Presentation of Pneumonia
- fever
- shortness of breath and/or shallow breathing
- cyanosis* 
- cough
- rust-coloured sputum*
- abnormal breath sounds (‘crackles’ in the lungs upon inhalation and exhalation)
*in serious cases

### Nutrition for Respiratory Illness
#### For Infections:
- Build + Boost Immunity with under-active immune protocol
- Pneumonia and bronchitis: add postural drainage

#### For Chronic Inflammation such as:
- COPDs
- hayfever
  - lower inflammation with overactive immune protocol

### Symptom relief for Respiratory inflammation + congestion

<table>
<thead>
<tr>
<th>In COPDs:</th>
<th>In hayfever:</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-acetyl-cysteine (NAC)</td>
<td>(pollen allergy)</td>
</tr>
<tr>
<td>low sodium diet</td>
<td>quercetin</td>
</tr>
<tr>
<td>dairy-free diet</td>
<td></td>
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<tr>
<td>Quercetin</td>
<td>homeopathy:</td>
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<tr>
<td></td>
<td><em>poumon histamine</em></td>
</tr>
<tr>
<td></td>
<td><em>Pollens</em></td>
</tr>
<tr>
<td></td>
<td><em>Allium cepa</em></td>
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<tr>
<td></td>
<td><em>etc.</em></td>
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</tbody>
</table>

### Acute Respiratory Illnesses: 9-1-1
- ARDS (acute respiratory distress syndrome)
- Asthma*
- Pneumothorax
- Pulmonary embolism
- SARS (severe acute respiratory syndrome)

### Parkinson’s Disease
- etiology: insufficient dopamine production

#### Clinical Aspect:
- Tremors
- Rigidity
- Akinesia
- Postural instability

progressive, degenerative condition
Suspect etiologies

- Toxins: mercury, managese, iron overexposures
- pesticides, PCBs
- head trauma

Recommendations

- dysbiosis protocol
- L-tyrosine (if not taking Levodopa)
- folic acid (if taking Levodopa)
- anti-oxidants: ACES

- interesting fact: the herb mucuna pruriens contains dopamine-like phytochemicals.

Multiple Sclerosis

= Degenerative or relapsing inflammatory condition of the central nervous system

Pathogenesis:

- inflammatory, auto-immune process (AI)
- attack of CNS myelin by T cells
- scars form (sclerosis) on white matter areas
- does not harm peripheral NS myelin
- loss of communication between brain, organs, limbs

Risk Factors: being female (2x risk)

 Signs and Symptoms

- co-ordination/balance difficulties (ataxia)
- changes in sensation
- muscle weakness/spasms
- visual disturbances (blindness, involuntary eye movements, neuritis)
- dysphagia = difficulty swallowing
- fatigue
- acute or chronic pain (not common)
- bladder and/or bowel difficulties

Recommendations for MS

- get tested for Epstein-Barr virus
- safely remove mercury amalgams
- Resolve any dysbiosis
- overactive immune protocol
- Vitamin D 4000 I.u. daily
MS: Geographic distribution of risk

Source: www.wikipedia.org

Myasthenia Gravis

- etiology: AI (auto-immune)
- Pathogenesis: antibodies formed against the acetylcholine (ACH) receptors of neurons, lead to intermittent loss of muscle strength, progressing to total muscle fatigue
- Clinical Presentation: fatigue, including muscle fatigue of the face and neck, mask-like facial appearance
- Support: over-active immune protocol

Headaches

1. Common: Non-vascular (tension)
   - Etiologies: stress, muscle tension, dehydration...

2. Vascular (Migraine)
   - affects one side of the head
   - often preceded by visual disturbances
   - often accompanied by nausea, vomiting
   - unresponsive to OTC analgesics
   - Etiologies: see triggers

Migraine Triggers

- emotional stress
- sleep deprivation
- drug withdrawal (ie. caffeine)
- hormonal shifts (women)
- weather extremes, rapid changes in barometric pressure
- nutrient deficiencies (Mg, B-2, B-6)
- problem FOODS...

Food Triggers

- **tyramine** is a natural peptide that may cause cerebrovascular spasms in susceptible people

Foods High in Tyramine

- pickled foods (incl. olives)
- beer and wine
- cheese
- Over ripe avocados
- Over ripe bananas
- cashews, peanuts
- cured, smoked meats
- dried fruits
- fermented soy products
Other triggers (food cont’d)

- histamines (red wine, tomatoes)
- chocolate, sugar, milk
- any of the top 5 allergenic foods
- mould, yeast
- food additives: aspartame, MSG, sulfites, nitrites, etc.

Recommendations

Increase serotonin:
- exercise
- 5-HTP: 50 mg 3x daily, p.m.
- take B complex with 50 mg B-6
- meditation

Reduce inflammation:
- EFAs, olive oil
- Feverfew herb (standardized; as directed)

Headaches (cont’d)

- elimination diet
- dysbiosis protocol
- hydration
- keep headache journal, food diary

Chronic Fatigue Syndrome and Fibromyalgia

- both idiopathic
- both diagnosed by exclusion of all other causes
- possibly most difficult cases to work with!

- physical and mental disturbances:
  sleep disturbances, digestive, cognitive probs,
  multiple sensitivities (MCS, EI)

Proposed Etiologies

- Epstein-Barr/other earlier infections
- heavy metal poisoning
- immune dysfunction
- hypothyroidism
- depression
- “burned-out” adrenals

Recall allopathic philosophy: if it cannot be detected by science, it does not exist

Clinical Aspect

<table>
<thead>
<tr>
<th>Chronic Fatigue Syndrome</th>
<th>Fibromyalgia</th>
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<tbody>
<tr>
<td>fatigue not relieved by bed rest</td>
<td>pain or tenderness in at least 11/18 specific muscle points</td>
</tr>
<tr>
<td>excess sleeping</td>
<td>insomnia</td>
</tr>
<tr>
<td>sore lymph nodes</td>
<td>IBS</td>
</tr>
<tr>
<td>joint and/or muscle pain</td>
<td>fatigue</td>
</tr>
<tr>
<td>headaches</td>
<td></td>
</tr>
<tr>
<td>poor concentration</td>
<td></td>
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<tr>
<td>“pins and needles”</td>
<td></td>
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Nutritional Help

- dysbiosis protocol/identify food sensitivities
- immune-building, NOT boosting
- Vitamin D +2000 I.u.
- FM: magnesium, melatonin, 5-HTP, B complex
- CFS and FM: anti-inflammatory diet, adrenal support