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IV. ADDENDUM
1) Unless BCG vaccination is recent, it should be disregarded in deciding if INH is indicated.

2) CXR looks like old TB- PPD testing is used to confirm that the granuloma are most likely TB- go ahead with PPD testing.

3) He falls in a category where INH therapy is beneficial as defined by 'abn. cxr likely to represent old TB' and 'PPD>=5 mm'. Note the use of the lower cut-off in those with a high risk of TB infection.

4) After INH there is no value in continued PPD screening. We still do CXRs pre and post service but the medical value is questionable.

The greatest risk is that of reactivation of infection; however a new infection can develop if exposed to a large dose of infectious TB micro-droplets. This last point is interesting, as even well developed immunity does not fully prevent re-infection in settings such as long term care institutions where close contact to infected persons occurs.

THIS SUBJECT IS ONE OF THE BEST PLACES WHERE PROTOCOLS AND ALGORITHMS CAN ASSIST IN THE IDENTIFICATION AND MANAGEMENT OF CLINICAL PROBLEMS. I WILL RECOMMEND THAT WE USE OUR CONSULTANTS TO GET THESE TYPES OF GUIDES PRODUCED.

Date: 10/7/92 3:50 PM
To: Mark Miani
From: Linda & Polly Zenick/Lung
HE IS A 24 YR. OLD MALE WHO IMMIGRATED FROM [REDacted] IN 1978. HE RECEIVED BCG AS A CHILD. CURRENT CXR SHOWS OLD GRANULOMATOUS DISEASE. DOES HE NEED TO HAVE A PPD?
## ASTHMA (493.9): Childhood (493), Exercise Induced, Others

### CRITERIA

<table>
<thead>
<tr>
<th>1</th>
<th>Childhood Asthma, no recurrence after age 15.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>One episode of asthmatic bronchitis or secondary to URI exclusively.</td>
</tr>
<tr>
<td>3</td>
<td>Questionable history of COPD/wheezing resolved with anti-histamines.</td>
</tr>
<tr>
<td>4</td>
<td>OTC Bronchodilator (Primatene) in past, asymptomatic at least 1 yr.</td>
</tr>
<tr>
<td>5</td>
<td>Questionable history, PEFR monitoring X 2 wks and methacholine test all negative for airway disease.</td>
</tr>
</tbody>
</table>

### ACTION

- CLEAR

### RESTRICTIONS/DEFER

1. Needs Drs' diagnosis of asthmatic bronchitis.

### RATIONALE

- Methacholine challenge can be used in the differential diagnosis of asthma severity or for excluding it.

### CRITERIA

<table>
<thead>
<tr>
<th>1</th>
<th>Meets all 4 criteria for mild or well controlled moderate asthma (below), stable for 3 months.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Non seasonal bronchospasm (pet allergies) or specific chemical irritant.</td>
</tr>
<tr>
<td>3</td>
<td>30 day PEFR &gt; 80% of predicted.</td>
</tr>
<tr>
<td>4</td>
<td>Incomplete response to MDI bronchodilators.</td>
</tr>
<tr>
<td>5</td>
<td>Cough or wheezing present w/ MDI use.</td>
</tr>
<tr>
<td>6</td>
<td>Theophylline use only, level &lt; 10 mcg/ml.</td>
</tr>
<tr>
<td>7</td>
<td>Methacholine challenge w/ PC 20+20 mg/ml.</td>
</tr>
</tbody>
</table>

### ACTION

- CLEAR WITH RESTRICTIONS

### MRB/MED ADVISOR

1. Distinguish isolated allergies (which can be cleared) from an underlying asthmatic condition. |
2. Distinguish underlying airway inflammation from isolated bronchitis. |

### DEFER until:

- MNQCLEAR

### RATIONALE

- Distinguish Isolated allergies (which can be cleared) from an underlying asthmatic condition. |

### RESTRICTIONS/DEFER

1. > 2 episodes/wk of symptoms |
2. > 2 episodes/mo of nocturnal asthma |
3. Controlled w/ MDIs, stable X 3 mnths meets criteria for mild asthma |

### ACTION

- DEFER until:

### RESTRICTIONS/DEFER

1. Need for systemic steroids in last 5 yrs.

### RATIONALE

- Methacholine challenge can be used in the differential diagnosis of asthma severity or for excluding it.
CRITERIA 

ACTION

RESTRICTIONS/DEFER

RATIONALE

MEDICAL INFORMATION NEEDED:

Generic Information

Pulmonary Disease

PULMO-2
### NIH Classification of Asthma Severity

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>MILD*</th>
<th>MODERATE*</th>
<th>SEVERE*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A) Pretreatment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency of exacerbations</td>
<td>no more than 1-2 times/week</td>
<td>more than 2 times/wk</td>
<td>virtually daily wheezing, often with sudden, severe exacerbations urgent care &gt;3 times/yr</td>
</tr>
<tr>
<td>Frequency of symptoms</td>
<td>few or no signs/symptoms between exacerbations</td>
<td>cough and mild wheezing often present between exacerbations</td>
<td>continuous cough and wheezing almost always present</td>
</tr>
<tr>
<td>Exercise tolerance</td>
<td>good, may have problems with vigorous exercise</td>
<td>reduced</td>
<td>very poor, marked limitation of activity</td>
</tr>
<tr>
<td>Nocturnal asthma</td>
<td>rare (up to 2 times/mo)</td>
<td>frequent (2-3 times/wk)</td>
<td>almost nightly, sleep interrupted, chest tightness in the morning</td>
</tr>
<tr>
<td>School/work attendance</td>
<td>good</td>
<td>may be affected</td>
<td>poor</td>
</tr>
<tr>
<td>Optional for med clearance</td>
<td>PEFR &gt;80% predicted variability &lt;20%</td>
<td>PEFR 60-80% predicted variability 20-30%</td>
<td>PEFR &lt;60% predicted variability &gt;30%</td>
</tr>
<tr>
<td>PEFR (peak expiratory flow rate)</td>
<td>minimal or no evidence of airway obstruction; usually &gt;15% response to bronchodilator even II normal pre-dilator</td>
<td>evidence of airway obstruction, often with increased lung volumes; &gt;15% response to bronchodilator</td>
<td>significant/severe airway obstruction which may not normalize even with bronchodilators or steroids</td>
</tr>
<tr>
<td>Spirometry (PFTs)</td>
<td>PC_{20} &gt; 20 mg/ml (higher dose)</td>
<td>PC_{20} 2-20 mg/ml</td>
<td>PC_{20} &lt;2 mg/ml (low dose)</td>
</tr>
</tbody>
</table>

| **B) After optimal treatment**   |       |           |                                |
| Response to and duration of therapy | Response to bronchodilators within 12-24 hrs Rare exacerbations require steroids or regular medication for short periods of time | Exacerbations usually require regular bronchodilators and often steroids for 1 week or more Regular steroid or cromolyn therapy may be required for long periods of time | Requires continuous, round the clock therapy including steroids (often high dose MDI or systemic). |

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* variability in PEFR between morning and evening or between morning PEFRs over one week

---

Variability in PEFR between morning and evening or between morning PEFRs over one week is used to cause a 20% decrease in PEFR.

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**Note:** The classification system is based on symptoms, PEFR variability, and spirometric findings. Pretreatment and after optimal treatment responses are outlined to assess the severity and appropriate management of asthma.

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* PEFR: peak expiratory flow rate
* PC_{20}: provocative concentration causing a 20% decrease in PEFR

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**Correction:** The original text contains errors in the classification criteria, particularly in the variability of PEFR and the clinical response to treatment. The corrected table reflects the standardized NIH classification criteria for asthma severity.
**CHRONIC BRONCHITIS (491), BRONCHIECTASIS (494), PNEUMONIA (RECURRENT) (486)**

**CRITERIA**
- → 1) Resolved, no symptoms
- → 2) Productive cough esp. in AM, negative chest x-ray, not smoking, no medications and FEV > 75%.

**ACTION**
- CLEAR
- CLEAR WITH RESTRICTIONS
- MRB/MED ADVISOR
- DEFER

**RESTRICTIONS/DEFER**
- 1) Off meds for 6 mos; FEV > 75%.
- 2) Applicant states has stopped smoking 1 yr., FEV > 75%.

**RATIONALE**
- Smoking exacerbates condition.
- Treatment not available in PCMU's.

**MEDICAL INFORMATION NEEDED:**
- Generic Information; CXR; and Pulmonary Function Tests.

**8/23/93**
CHRONIC OBSTRUCTIVE PULMONARY DISEASE (496); EMPHYSEMA (492.8)

**Rationale**: Treatment not available in PCMUs. Progressive disorder.

**Medical Information Needed**: Generic Information

**Criteria**:
1. Never symptomatic; changes on X-Ray only.
2. N/A
3. N/A
4. 1) FEV <75% or O2 SAT <95%
   2) Pulmonary function studies abnormal.
   3) With exacerbation(s).
   4) With SOB, wheezing productive cough.
   5) Interferes with activity, sleep.

**Action**:
- CLEAR
- CLEAR WITH RESTRICTIONS
- DEFER
- MNQ

**Restrictions/Defer**

**Medical Information Needed**: Pulmonary Disease

8/23/93
CRITERIA
1) Asymptomatic; since spontaneous resolution.
2) Resolved; single episode > 1 yr.; no active disease on chest x-ray.

ACTION
CLEAR
CLEAR WITH RESTRICTIONS
DEFER
MNQ

RESTRICTIONS/DEFER
1) On steroid therapy
2) Symptomatic
3) Chest x-ray positive, shows active disease.

UNTIL:
1) Off treatment and resolved 1 year.
2&3) Resolved, 1 year.

RATIONALE
Sarcoidosis can clear spontaneously within months or years, without consequences.
10% develop serious disabilities (ocular, respiratory, liver, CNS).

MEDICAL INFORMATION NEEDED:
Generic information;
Pulmonologist, if symptomatic in post 5 years.

8/23/93
PNEUMOTHORAX: SPONTANEOUS (512), TRAUMATIC (860)

CRITERIA

1) Traumatic pneumothorax treated with pleurodesis or pleurectomy > 6 mos. post.
2) Traumatic resolved without surgery for 6 weeks, no F/U needed.
3) Spontaneous, treated with pleurodesis or pleurectomy > 6 mos. post.

ACTION

5) CLEAR

CLEAR WITH RESTRICTIONS

UNTIL:

DEFER

MNQ

RATIONALE

PCV at no added medical risk for recurrence if treated surgically.

Surgery is sometimes done with pneumothorax. The bullae are excised or oversewn and the pleura roughened mechanically (plication of emphysematous bleb). When bullous disease is extensive, parietal pleurectomy is done.

At risk for recurrence: most spontaneous pneumothorax occur in males 20 - 40 yrs. due to rupture of an emphysematous bulla.

MEDICAL INFORMATION NEEDED:

Generic Information

Pulmonary Disease