Evidence Based Practice in Pre-Employment PPD Screenings

The Problem

All individuals with a positive PPD undergo routine pre-employment screening chest radiography. The Centers for Disease Control recommend a single posterior-anterior (PA) view be obtained, with additional radiographs performed at the physician's discretion. Most Boston area teaching hospitals, including BIDMC, routinely order PA and lateral views to screen employees with positive PPDs..

Aim/Goal

To determine if an additional lateral radiologic view to screen employees with positive PPDs adds clinically relevant information not seen on a PA view.

The Team

- Ronald Eisenberg, MD, Radiology

The Interventions

- 2 Radiologists retrospectively reviewed chest x-rays from 875 individuals with positive PPDs to determine:
  - Number of abnormalities noted on lateral view only
  - Number of abnormal findings on lateral view that changed the decision from the PA view
- Reviewed findings with Employee Occupational Health and Department of Infections Disease
- Educated staff on recommended changes

The Results/Progress to Date

PPD Tests	#
Total tests	875
Positive tests	91

Chest X-Rays	# Positive Findings	# Negative Findings
PA View	91	0
Lateral View	*16	75

*In **NO** case did information from lateral view change the decision made on the PA

★BENEFITS:

1) ↓ radiation exposure by 67%
2) ↓ cost
3) ↑ departmental throughput

Lessons Learned

In assessing individuals with positive PPD results in a pre-employment setting:

1. Lateral radiographs provide NO additional diagnostic value
2. Single PA view is sufficient to demonstrate all abnormalities

Next Steps/What Should Happen Next:

Based on the results of this study, we have changed the pre-employment screening process for individuals with positive PPD tests. We have eliminated the lateral view from the screening chest examination.

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