

A Medical Overview

for DEEOIC staff



Agenda

AGENDA	
8:30	Medical Overview
9:15	Pulmonary Lung Disease
10:00	Break
10:15	Chest X-rays
10:45	Asbestos-Related Disease
11:15	Silicosis
Noon	Lunch
1:00	Cancer
2:00	Hematologic Malignancies
2:30	Break
2:45	Impairment
3:15	Questions & Answers

It ain't what you don't know that gets you into trouble. It's what you know for sure that just ain't so.

Mark Twain

- Problems of terminology and interpretation test results
- Terms of Art, Acronyms and Abbreviations

How Doctors Think

- Consider “How Doctors Think”
- Clinical Judgment
- Uncertainty & Probabilities
- PM 2-0300, “Developing & Weighing Medical Evidence” § § 3 to 15

Clinical Judgment

- Data Collection
- Develop & Test Hypotheses
 - Patterns, Inferences, Analogy
- Process of Elimination

History & Physical

- Patient History
 - Chief Complaint CC
 - R.O.S.; Symptoms
 - Family Hx, Smoking, Alcohol
 - Work Hx
- Physical Exam – Signs
- Laboratory
 - Blood (e.g. “negative”)
 - Imaging
 - Pathology
 - Clinical Tests (e.g. PFT, EKG)

Physician's Notes

- Litany: WDWN 30 y/0 wht male w/ “cc” in NAD

S.O.A.P

- Subjective
- Objective
- Assessment
 - Differential Diagnosis
 - Differential Etiology
- Plan – Treatment and Follow-up

Examples of Symptoms

- Pain
- Fatigue
- Pruritis
- Hematemesis
- Rhinitis
- Hematochezia, Melena
- Dyspnea
- Petechia, Purpura, Ecchymosis
- Hemoptysis

Physical Exam

- Inspection
- Palpation
- Percussion
- Auscultation
- **Look, Feel, Listen**

Examples of Findings: Physical exam, lab testing

- Mass
- Edema, Ascites
- Wheezing
- Uremia
- Anemia
- Leukocytosis
- Leukopenia
- Cyanosis, Clubbing
- Cachexia
- Rales, Rhonchi
- Hyper-reflexia, Hypo-reflexia
- Babinski's Sign, McBurney's Sign

Examples of Diseases ("not causal")

- Cancer
- CHF
- Sarcoidosis
- Asthma
- CRF, CKD
- AMI
- Gastric Ulcer
- Pneumonia

Case Definitions

- Parkinson's Disease
 - Tremor at rest
 - Muscle rigidity
 - Characteristic gait
 - Mood disturbances
 - Slowly Progressive
 - Responds to anti-Parkinson's drugs
 - See Bulletin 08-15 “**Parkinsonism & Parkinson's Disease**”

Selected Set of Diseases that Connote Causation

- Pb Poisoning
- Asbestosis
- Silicosis
- CBD
CWP
- TB

Clinical Labels from findings

- Clinically useful but do not connote a diagnosis or etiology
 - Pulmonary fibrosis – consider obtaining an IH consult (pg. 21 Resource Guide, PM E-500 Exhibit 2)
 - Pleural thickening – consider obtaining an IH consult (pg.
 - Hypertension

Thinking Process

- Patterns of symptoms, signs, history
- Match process with case definitions
- What is observed in the community
 - But worker's conditions are often different
- Age-specific conditions
- What is the MD's specialty – experience
- Variety of biases - Time, SES
- Probability – “hoof beats in DC, not zebras”

Physician's Goal

- Goal: Diagnosis & Treatment
- Clarify disease process or pathophysiology
- Rarely Causation

Causal Chain

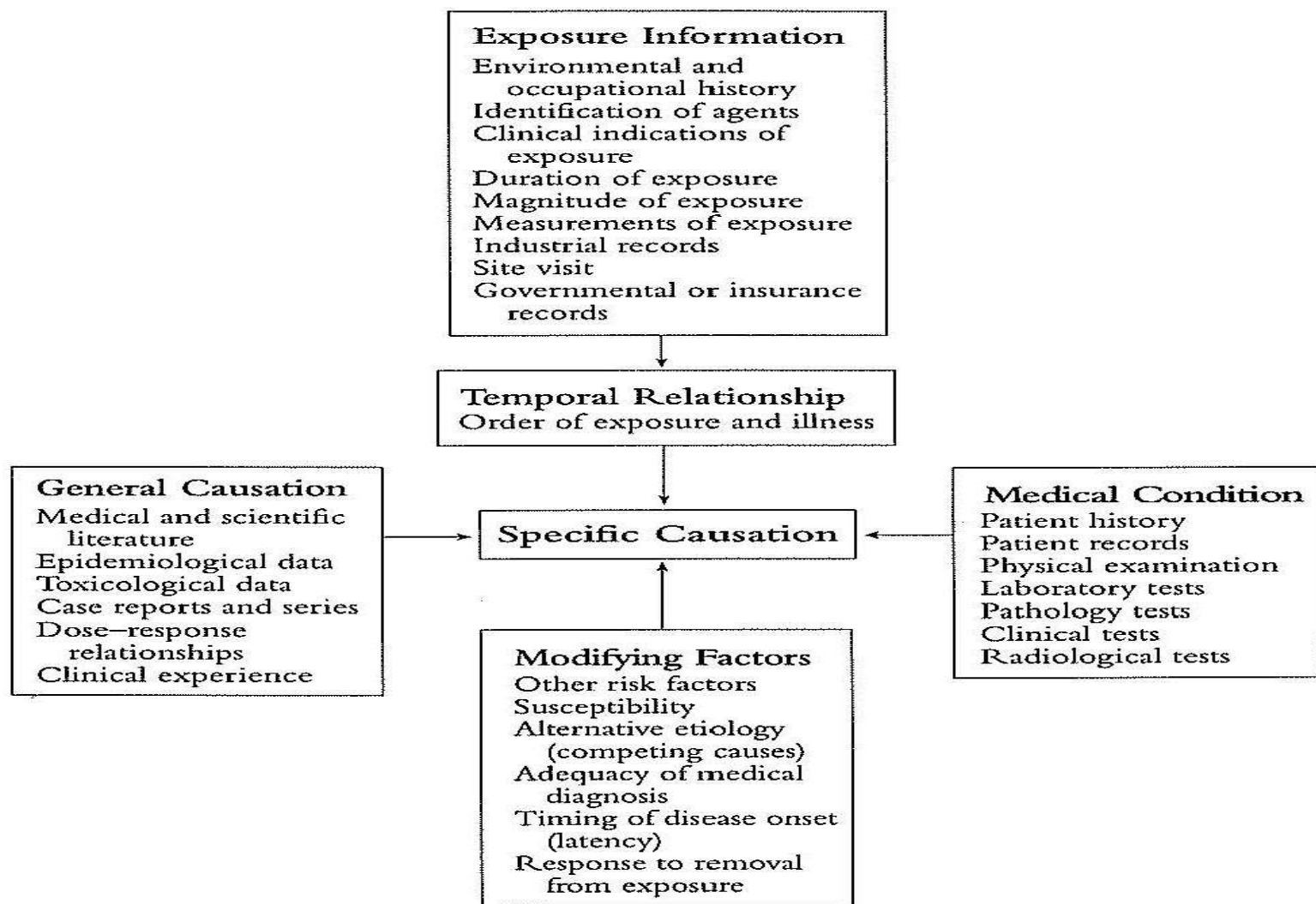
- Heart Attack (Myocardial Infarction)
- Blockage Coronary Artery
- High Blood Cholesterol
 - Genetics
 - Diet
 - Sedentary

Note: AMI send to DMC if Dx Death cert

Causation

- General Causation (could cause)
- Specific Causation (did cause)
 - “...establish not only that the defendant’s agent is capable of causing disease but also that it did cause the plaintiff’s disease.” “This question is not a question that is addressed by epidemiology.” P 382
 - Pg. 65 of Resource Guide

Figure 1. Determining External Causation



Causation

- Causation – DMC Handbook (pg 6 of Resource Guide)
- Framework
 - Exposure – Route, Intensity, Duration, Latency
 - Health Outcome
 - Plausible Linkage – temporal relationship
 - Quantity and quality of studies (Evidence-base)
 - Judge Each Causal Element
 - Consider Alternative Explanations

Framework (cont'd)

- Caused
- Contributed to
 - Increase the likelihood, progression or acceleration (↑ risk or earlier onset)
- Aggravated

Framework (cont'd)

- Population vs. Individuals
 - Heterogeneity
- Interaction
 - Additive
 - Synergistic

3 Types of Questions for DMCs

- **Diagnosis or treatment**
- **Causation**
 - **Classic**
 - **Contribution**
 - **Aggravate**
- **Impairment**

**Expert must be qualified
to perform the specific task at hand**

DMC Checklist:

The DMCs should ask themselves: Have I

- Answered specific questions posed?
- Used specific program criteria?
- Considered each aspect of causation: “cause”, “contribute” and “aggravated”?
- Fully developed my rationale?
- Performed a literature search to assure due diligence?
- Included supportive references?
- Submitted my report within the 21 day time frame?
- Signed the conflict of interest statement?
- Clearly stamped the report “medical confidential”?

**DON'T SECOND
GUESS THE
PHYSICIAN.**

What we covered

- How doctors assess symptoms, signs and test results
- Difference between the clinician's goal and program goals
- How medical records are structured

What we covered

- Concepts of “differential diagnosis” and “differential etiology”
- DMC framework for evaluating “caused, contributed to or aggravated” as found in the DMC Handbook
- Procedures for assigning DMCs for each of 3 main types of program questions.

Questions

