

To Honor John Henry (Jack) Mulholland and Emile Mohler



John Henry Mulholland, MD, MACP
Governor, MD Chapter, 1982-86



Emile R. Mohler, MD, MACP
Governor, MD Chapter, 1990-94

Back to the Bedside: A Call to Arms

**ACP Maryland Chapter
Mulholland Mohler Residents Meeting**

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Disclosures

Dr. Ende has no conflicts of interest related to this topic.

How Bad Is It?



- Well, maybe not that bad, but...
- over-reliance on costly tests
- declining level of bedside skills
- concern that physical exam skills will no longer be integral to medical care

(Not) Talkin' 'bout (or to) my generation...

Peter Townsend of The Who, 1965



What about the teachers of tomorrow?

Will your learners be this interested on rounds?



We Need to Start a Movement: *Back to the Bedside*



And we'll need a tag line –

***Listening to Patients;
Directing their Care***

... or you can be like Don Quixote



“... and he jumped upon his horse,
and rode madly off in all directions.”

from *Don Quixote*, Cervantes 1605

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4. Enhances your performance as a teacher.

3. You can get good at this, really.

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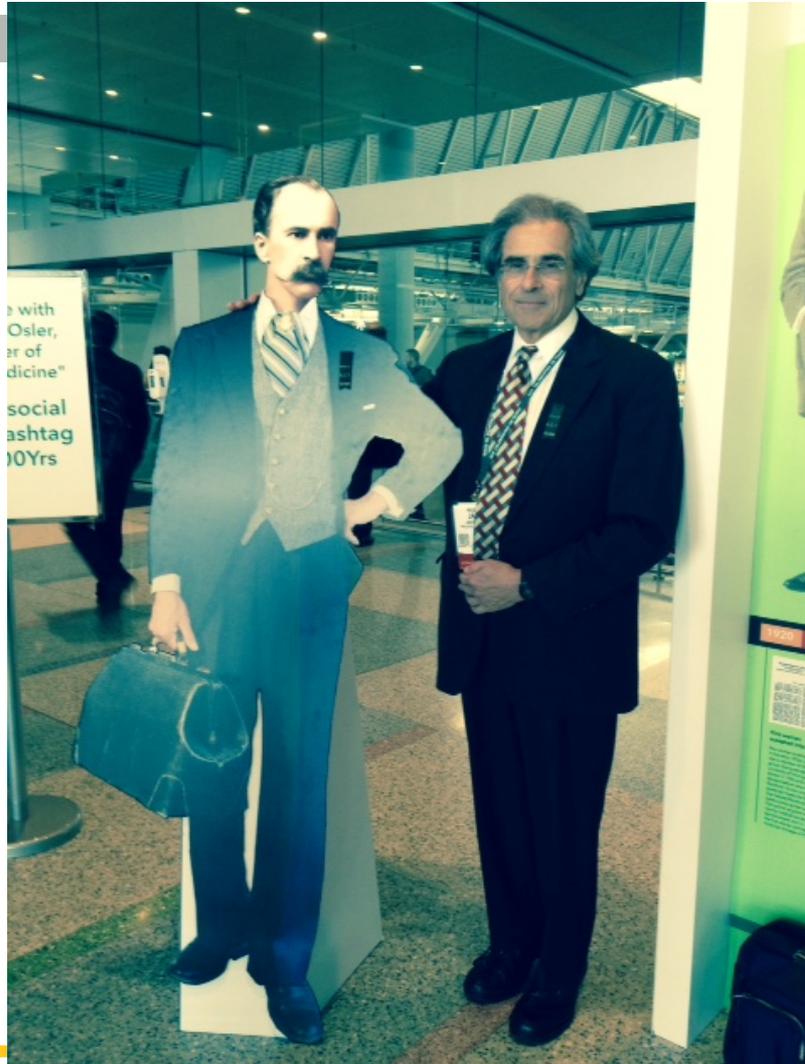
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Connecting with Medicine's Traditions and Luminaries- But From the Right Side, Please



... and here's what you'll see



K.F. Wenckebach (1864-1940)

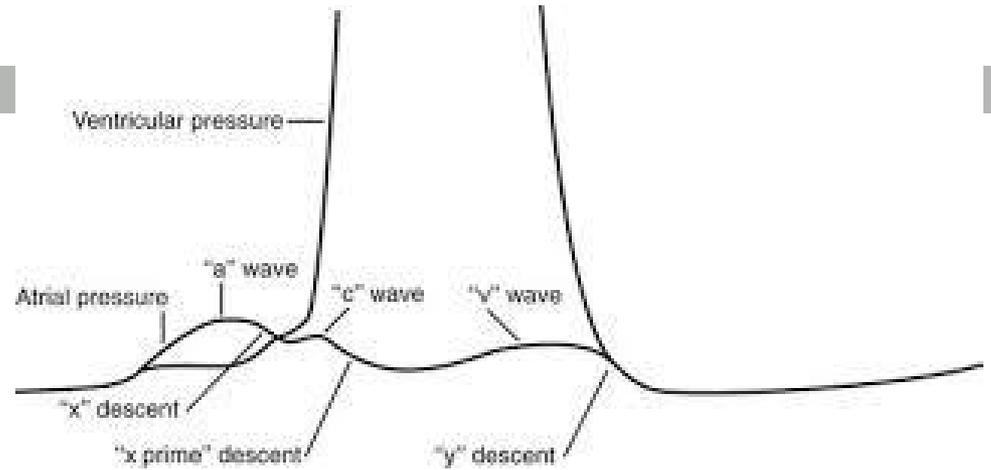
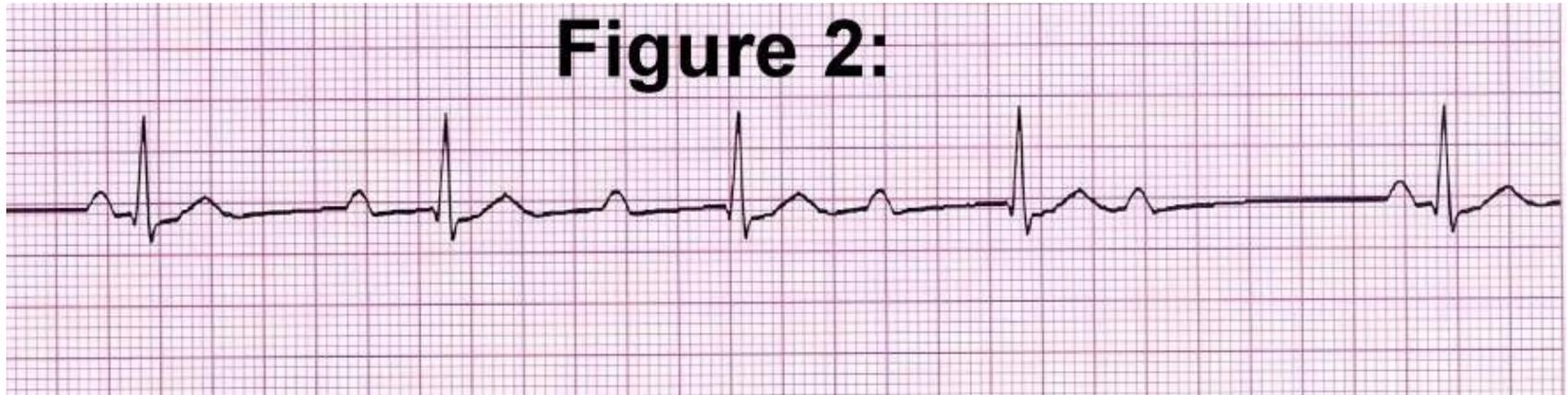


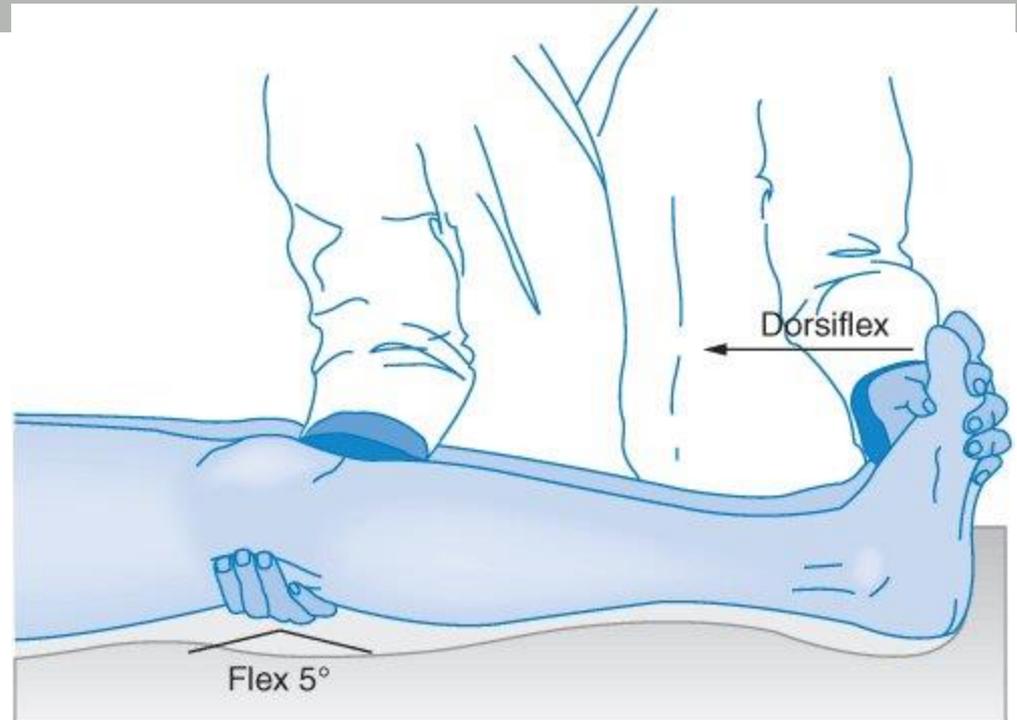
Figure 2:



Not all findings are worth finding



John Homans 1877-1954

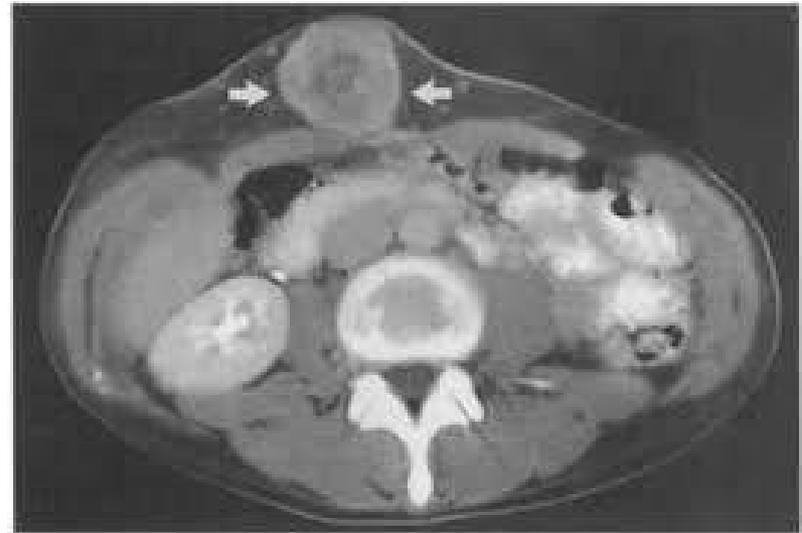


The Dorsiflexion Sign

How did she know?



Sister Mary Joseph Dempsey (1856-1939)



Sister Mary Joseph nodule

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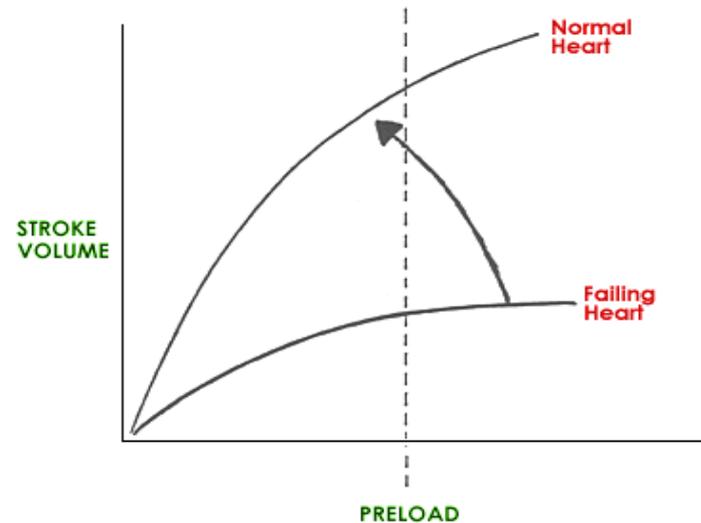
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The Abdominojugular Reflux; that's AJR not HJR



30 mmHg for 10
seconds



The Starling Curve

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Likelihood Ratios

The proportion of patients *with* a disease who have a particular finding, divided by the proportion of patients *without* the disease who also have that same finding.

LR + “the rule-in power of a positive test result”
sensitivity/1-specificity

LR - “the rule-out power of a negative test result”
1-sensitivity/specificity

The “Rule-in/out” Power of Likelihood Ratios

Likelihood ratio

LR + LR –

>10 <.1

4-10 .1 to .3

2-4 .3 to .5

1-2 .5 to 1

Effect on post-test probability

large (often conclusive)

moderate

small (but sometimes important)

small (rarely important)

Physical Exam Findings of Peripheral Vascular Disease

<u>Finding</u>	<u>Positive LR</u>	<u>Negative LR</u>
Loss of limb hair	1.7	NS
Capillary refill > 15 sec	1.9	NS
Asymmetrically cold	6.1	0.9
Absent femoral pulse	6.1	NS
Absent foot pulses (both)	14.9	0.3

Adapted from McGee, 2001

A 58 yo Man with Shortness of Breath



A 58 year-old man with a 40 pack-year smoking history is evaluated for shortness of breath with exertion.

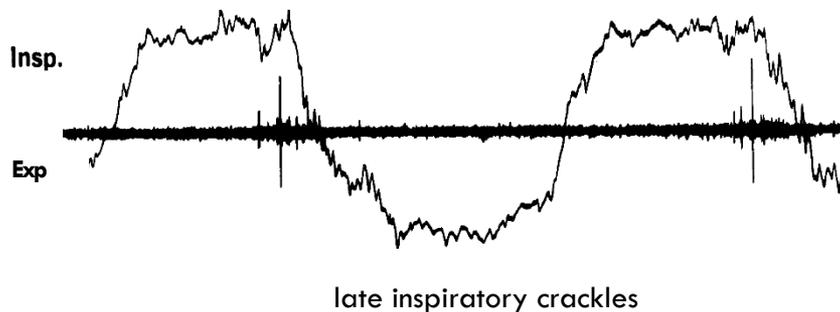
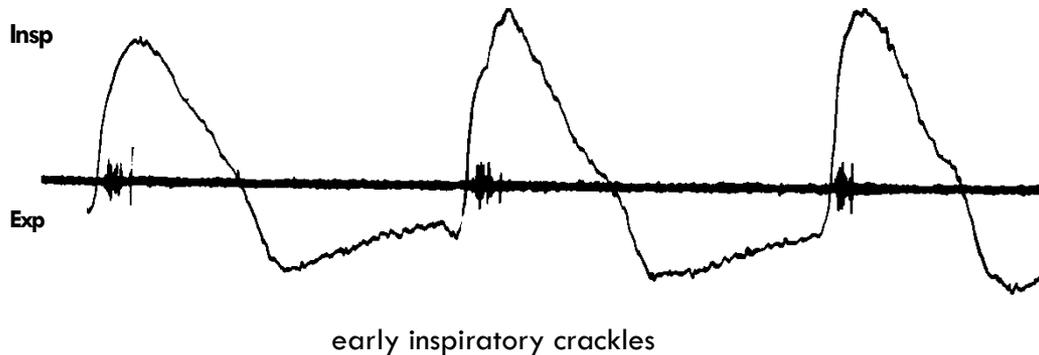
Examination reveals sparse, early inspiratory crackles at both bases.

Pre-test probability of COPD: 25%

Pre-test odds of COPD: $1/3 = 33\%$

LR of early insp crackles: 14.6

There Are Crackles, and Then There Are Crackles



- “Miniature explosions,” the sound of airways popping open -Mangione, 2008
- Early inspiratory crackles, originate in large, central airways, as in COPD
- Late inspiratory crackles, originate in peripheral airways, as in restrictive lung disease, and CHF

from Nath AR, *Thorax* 1974

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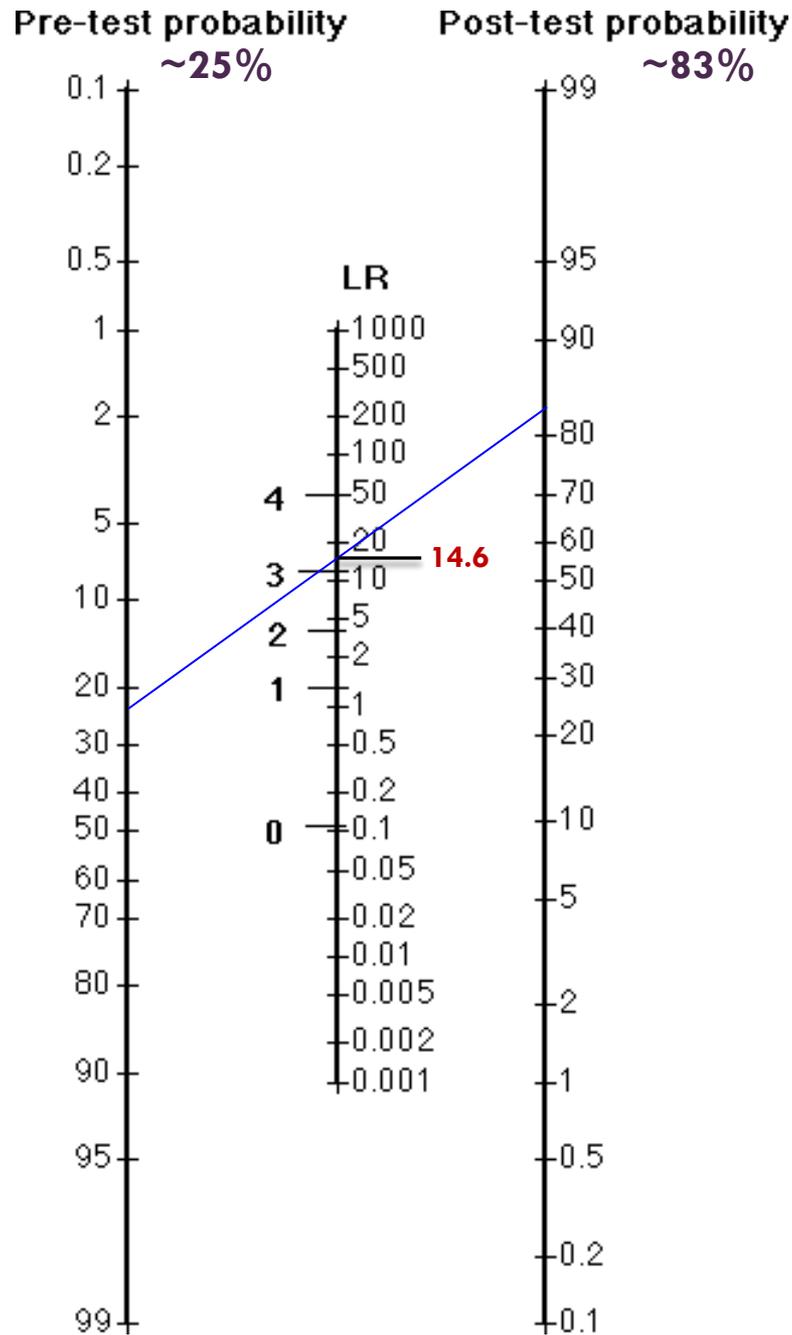
Pre-test odds of COPD: $1/3 = 33\%$

LR of early insp crackles: 14.6

Post-test odds: $.33 \times 14.6 = 5$

Post-test probability of COPD: $5/6 = 83\%$

**Early
Inspiratory
Crackles
LR pos=14.6**



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A 28 yo Woman with Fatigue



A 28 year-old woman is seen in your office for a routine exam. She reports recent onset of fatigue. Gynecological history includes two pregnancies and somewhat heavy menses.

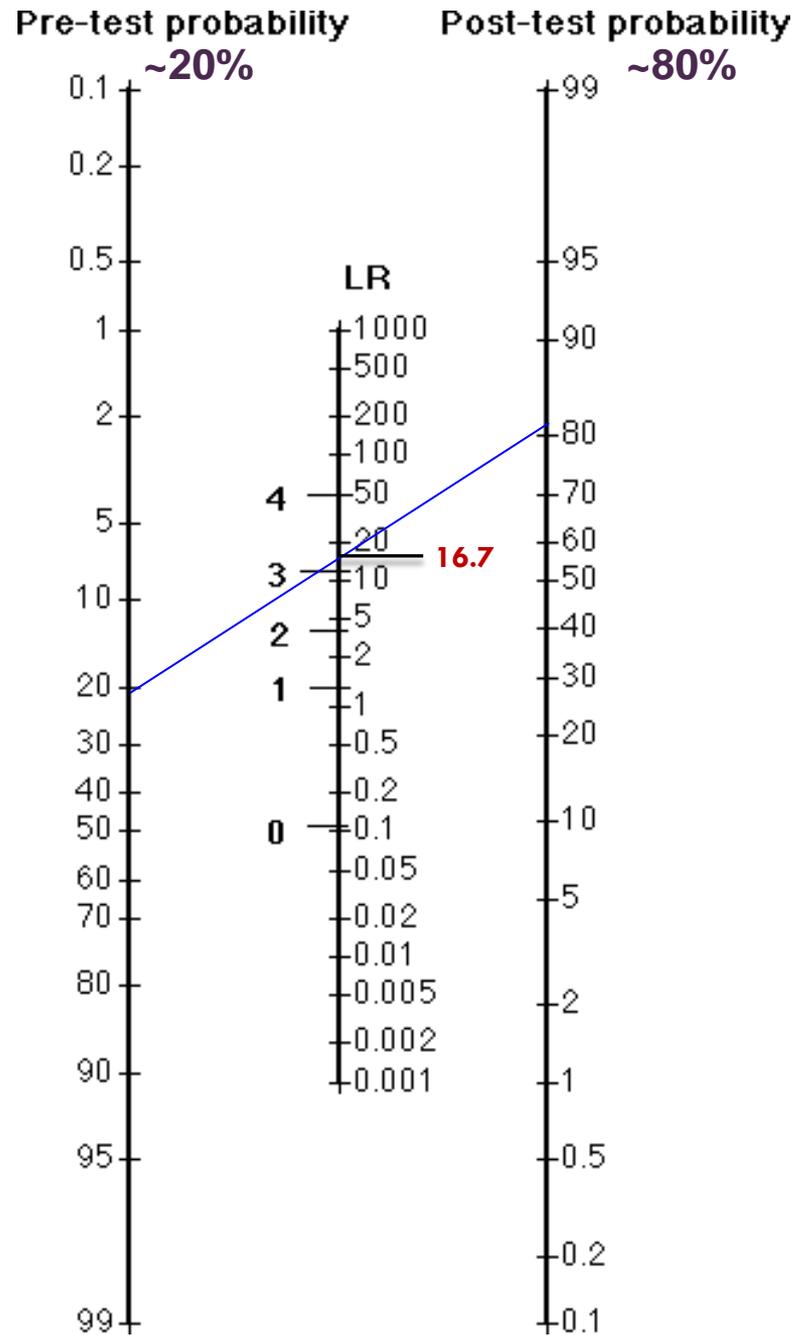
You would like to know if she is anemic.

Physical Exam Findings of Anemia (Hb < 11 g/dl)

<u>Finding</u>	<u>Positive LR</u>	<u>Negative LR</u>
Nail bed pallor	1.7	0.6
Palmar pallor	2.5	0.5
Conjunctival rim pallor	16.7	0.6

Adapted from McGee, 2001

**Conjunctival
Rim Pallor
LR pos=16.7**



What exactly is conjunctival rim pallor, anyway?



...loss of peripheral rim of redness virtually diagnostic of anemia (Hb<11gm)



... but suppose you didn't know that?

Effect of examiners' level of skill upon the likelihood ratio for detection of IHSS using the Valsalva maneuver

<u>Group</u>	<u>Sensitivity</u>	<u>Specificity</u>	<u>Positive LR*</u>
Trained cardiologists	.65	.96	16.2
Hypothetical Group A	.60	.90	6.0
Hypothetical Group B	.50	.85	3.3

* $LR = \frac{\text{sensitivity}}{1-\text{specificity}}$

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A 64 yo Woman with bilateral leg swelling



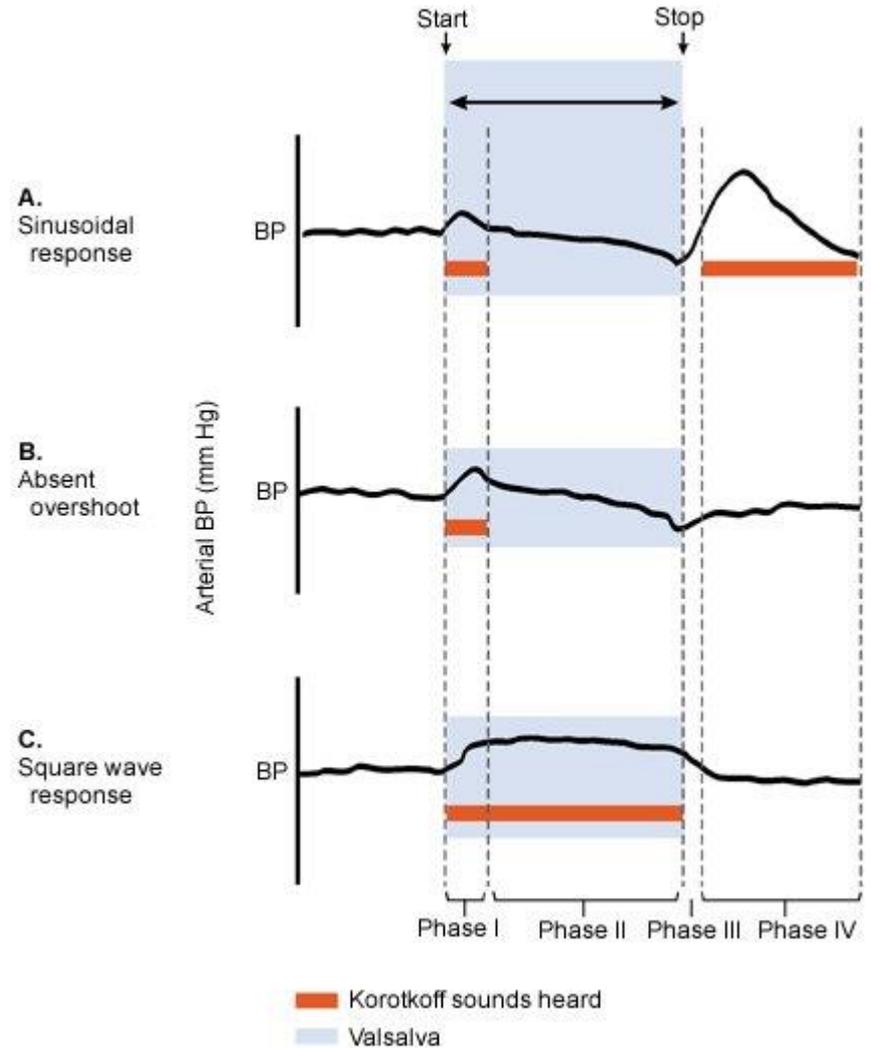
A 64 yo woman notes that for the past few weeks, both legs have become swollen, particularly late in the day. She also reports shortness of breath after walking up stairs, and she wonders if she has become “out of shape.” She has a history of hypertension, controlled with amlodipine.

Exam is normal except for 1-2+ edema bilaterally

Who needs an echo?



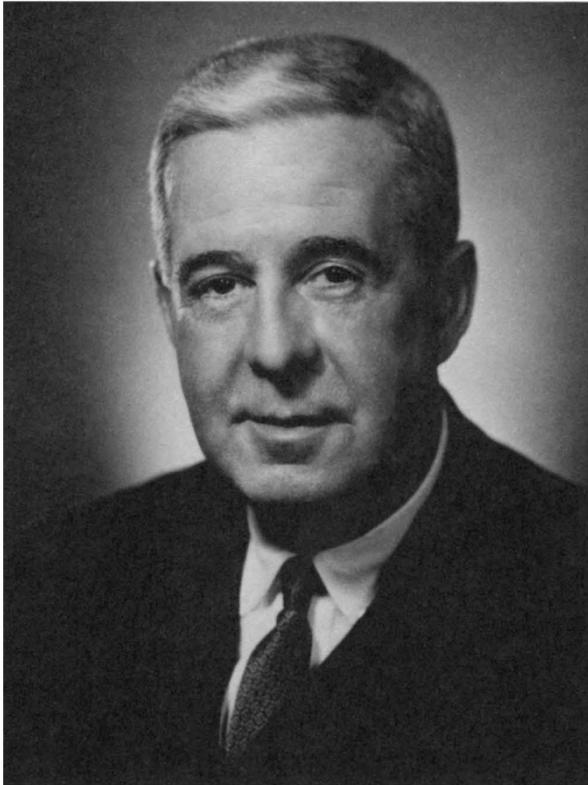
Antonio Maria Valsalva (1666-1723)



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One Patient's Perspective



Walsh McDermott, MD (1909-1981)

“When I am sick, I want a doctor who understands me as a whole person. But I also want one who understands my parts.”

Patients' Perceptions of Their Encounters

- 125 of 687 outpatients perceived their doctors omitted something important
- Of these omissions, 42% were parts (or all) of the physical exam
- These patients were significantly less satisfied with their encounter: 63% vs. 27% ($p < .0001$)

R. Kravitz, et al. *JGIM* 2000

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A 62 yo man with dyspnea on exertion (and a 28 yo intern with eyes wide open)



62 yo man, patient of mine with history of mitral valve prolapse and moderate MR presents with 1-2 week history of DOE.

Exam: BP 164/88 P 64 O₂ sat 98%

Appears worried, no resp distress

Lungs – clear

JVP – 6cm with neg AJR

Cor – 2/6 late, blowing murmur into S2 at apex

Ext – no edema

Valsalva maneuver – neg

A 62 yo man with dyspnea on exertion (con't)



Studies ordered: proBNP

- returned the next day - 32

Interventions:

- change HCTZ to chlorthalidone
- “call if symptoms worsen”
- return in one week

Follow-up:

- felt better
- BP 146/82

Teachable moment re:

- office assessment for CHF
- implicit: value of physical exam

The Five Minute Moment



- feature one maneuver at a time
- introduce with narrative
 - usefulness
 - anecdote
 - case vignette
- demonstrate finding
- discuss interpretation, common errors, etc.

Adapted from Chi J et al. *AJM*; 2016 :792-795

The Chiefs' Service



- huddle
- discharge patients seen first
- **bedside presentations**
- diagnostic timeouts
- post-discharge follow-up rounds

Bennett, N et al. Bringing Rounds Back to the Patient: A One-Year Evaluation of the Chiefs' Service Model for Inpatient Teaching. *Acad Med* 2016

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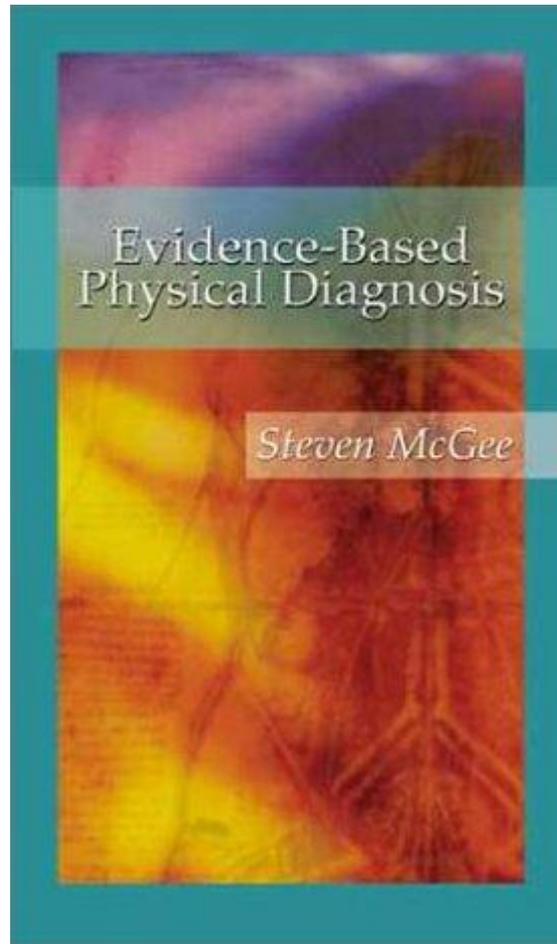
Faculty Development Resources for Learning (then teaching) Physical Diagnosis



ACP Waxman Center

- *JAMA* Rationale Clinical Exam Series
- ACP Waxman Center
- Numerous resources on the internet
- Practice, practice, practice, and read, read, read, starting with Steven McGee's Evidence-Based Physical Diagnosis, then anything by Abraham Verghese, Salvatore Mangione or Andrew Elder.

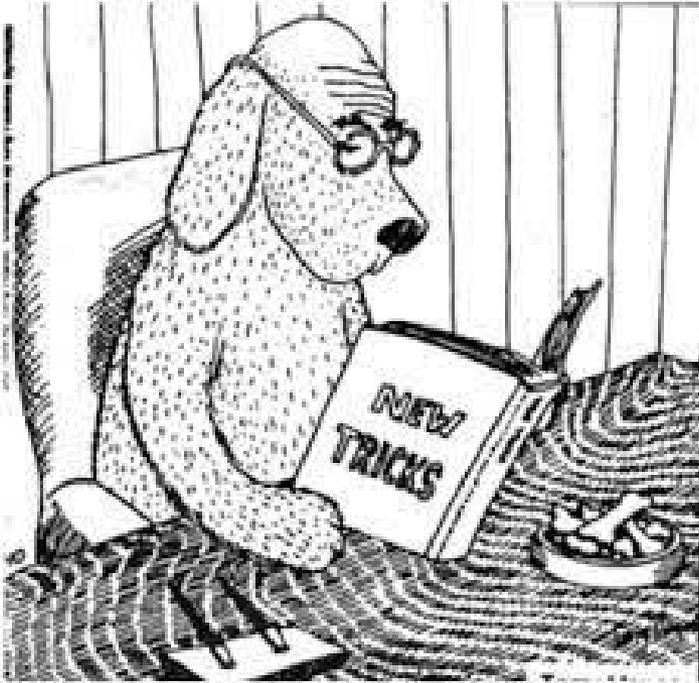
The Bible



Evidence-Based
Physical Diagnosis

Steven McGee

Coming to an IM Office and Inpatient Unit Near You: Point of Care Ultrasound



- Complements the history and physical exam
- Particularly helpful in assessing volume status, pulmonary edema, pneumonia, DVT, bladder, and ascites
- Fast, (well, somewhat fast) non-invasive, inexpensive and brings the doctor to the bedside
- Sign me up!

Summary

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1. **If you do it, others will follow.**

