Medical Literature 2018
Turning Evidence into Practice

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Disclosurers:

- None

Roadmap

- Case based interactive format
- Multiple articles per case
- Quick hitters and Short takes
- ** Lightning Reviews **
- Summary of suggested practice changes

Learning Objectives

1. *Describe* the primary conclusions
2. *Identify* changes to your practice
3. *Implement* these practice changes

Journals Reviewed…

- Jan 2018 – Dec 2018
  - N Engl J Med
  - JAMA; JAMA Intern Med
  - J Gen Intern Med
  - J Hospit Med
  - Ann Intern Med + ACP J Club
  - Lancet; Stroke, Am J Med, Circulation, J Am Coll Cardiol, BMJ, Chest
  - ACP Plus, BMJ Online update, J Watch

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Disclosures

- None relevant

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Topics

- Syncope and PE – something new…
- Pneumonia
- A fib and Heart Failure
- Sepsis, Stroke
- Opiate use disorder
- Acute cholecystitis

Notables in 2018

www.medicalnewstoday.com/articles/161255.php

N Engl J Med 2018;379:1499-508.

N Engl J Med 2018;379:1509-18.

N Engl J Med 2018;379:1519-28.

N Engl J Med 2018;379:1529-39.

N Engl J Med 2018;378:740-51.

Lancet 2018;391:1357-66.

Clin Infect Dis 2018;66:e1-e48.

1. ORAL VANCO or FIDAX instead of METRO, non severe
2. If severe, high dose enteral vanco + IV metro

JAMA 2018;320:1031-1032.

JAMA 2018;320(23):2471-2473.

J Am Coll Cardiol 2018;72:2199-2269.

Ann Intern Med 2018;168:351-358.

Changes in:

- Diagnosis
- Thresholds for therapy initiation
- Ongoing management

JAMA 2017;318:2132-2134.

Cluster randomized trial of 319 black men
Pharmacist-led intervention in the shop
SBP reduction at 6 months 21.6 mm Hg more compared to control

N Engl J Med 2018;378:1291-301.

Ann Intern Med 2018;169:704-709.

Ann Intern Med 2018;169:885-886.

Case 1

67 y/o woman presents with syncope while seated at dinner. Had been feeling more dyspneic that afternoon while mowing the lawn.

BPPV, HTN, OA, GERD, OSA

146/74, 102, 18, Afeb. Clear lungs, trace edema Neuro exam including gait/cerebellar nl.

EKG NSR with sinus tach

CXR clear

Case 1, cont.

D-dimer 1.05

CT-PE is performed and…

N Engl J Med 2016;375:1524-31.

JAMA Intern Med 2018;178:356-362.

PE in Syncope

JAMA Intern Med 2018;178:356-362.

PE in Syncope

PE in Syncope

JAMA Intern Med 2018;178:356-362.

Case 1a: PE

There are bilateral segmental pulmonary emboli without evidence of cardiac dilation.

You begin anticoagulation and ask a pharmacy colleague about DOAC's they might recommend.

But as a great internist, you can't help but ask the larger question of why…

Case 1a: Do I Look for Ca?

A. H&P and age appropriate screening
B. Above, plus IV/po contrast CT abd/pelvis

Ann Intern Med 2017;167:410-417.

Idiopathic VTE Cancer Screening

Ann Intern Med 2017;167:410-417.

Idiopathic VTE Cancer Screening

Ann Intern Med 2017;167:410-417.

Idiopathic VTE Cancer Screening

Ann Intern Med 2017;167:410-417.

Quick Hitter

N Engl J Med 2018;378:615-24.

Case 1b: no PE

The CT scan shows evidence of prior granulomatous disease but no pulmonary emboli with good timing of contrast bolus.

As you consider your next move, you are called for rapid atrial fibrillation to 160s with hypotension – she is close to passing out again.

Hurray! An answer!

Case 1b: no PE

Now you DO get an ECHO and LVEF 35%

More detailed history shows Class II-III DOE over six months

And more ETOH intake than first described

Her stroke risk score is high…

BMJ 2017;359:j5058.

Please see slide at Presentation

BMJ 2017;359:j5058.

N Engl J Med 2018;378:417-27.

CASTLE-AF Study

N Engl J Med 2018;378:417-27.

CASTLE-AF Study Results

CASTLE-AF Study

N Engl J Med 2018;378:417-27.

JAMA 2018;319:2227-2228.

Lightning Review: Acute Stroke

NNT 3, $p < 0.001$

NNT 9, p = 0.02

NNT 8, p = 0.04

Case 2

56 y/o man presents with one week of worsening pleuritic chest pain with productive cough, fevers, and chills.

Tobacco, HTN, MDD, obesity

92/62, 108, 22, 101.2. Bilat wheezing, dec BS, normal fremitus.

EKG NSR with sinus tach

CXR clear

Chest 2018;153:601-610.

CAP on CT: Reality Check

Chest 2018;153:601-610.

EPIC CT-CAP Initial Clinical

EPIC CT-CAP Initial Clinical

CAP on CT: Reality Check

Chest 2018;153:601-610.

Cochrane Database of Systematic Reviews 2017, Issue 10. Art. No.:CD007498.

SALT-ED – Non-ICU

N Engl J Med 2018;378:819-28.

SALT-ED: Results

SALT-ED – Non-ICU

N Engl J Med 2018;378:819-28.

SMART – ICU

N Engl J Med 2018;378:829-39.

SMART: Results

SMART – ICU

N Engl J Med 2018;378:829-39.

Please see slide at presentation

Cochrane Database of Systematic Reviews 2017, Issue 12. Art. No.:CD007720.

Clinical Infectious Disease 2018;66:346-54.

Steroids in CAP

Clinical Infectious Disease 2018;66:346-54.

Steroids in CAP: Results

Steroids in CAP: Harms

Steroids in CAP

Clinical Infectious Disease 2018;66:346-54.

CID paper 6 studies; Cochrane 17 (Children = 4)

CID authors couldn't get IPD from 3 studies

CID paper exploration age, COPD, blood cultures, Strep pneumoniae, duration of steroids

Bottom line: do it to speed time to recovery, recognize the risks

Case 2, cont.

CT scan shows lingular infiltrate w/ air bronchograms, no effusion.

Start CTX, azithro, and empiric COPD rx.

HD #2, confused, agitated, tremulous…

J Hospit Med 2018;13:221-228.

Lightning Review: Opioid Use Disorder

Ann Intern Med 2018;169:137-145.

J Hospit Med 2018;13:263-271.

Lightning Review: Opioid Use Disorder

JAMA 2018;320:984-994.

JAMA 2018;320:984-994.

Miscellaneous Short Takes

N Engl J Med 2018;379:2407-16.

Practice Summary

Things to Do:

1. Check out 2017 ACC-AHA HTN Guidelines
2. Look for PE in syncope, although it's probably less common than previously thought
3. Idiopathic VTE: screen for ca with H&P and age appropriate screening
4. CT scan or US to dx PNA if CXR neg / mgnt Δ
5. Advocate for Procalcitonin algorithms

Practice Summary

Things to Do:

6. Select balanced crystalloids as a saline alternative, especially in the ICU / sepsis
7. Connect opiate use disorder patients with medical therapy options
8. Prescribe meropenem over pip/tazo in E coli or Klebsiella bacteremia if CTX resistant
9. Prescribe oral vanco or fidax for non-fulminant C diff instead of metro

Practice Summary

Things to Do:

10. Advocate for lap chole vs. perc tube in high risk patients w/ acute cholecystitis

Practice Summary

Things to Consider:

1. Refer AF – CHF patients to EP for ablation
2. Naltrexone for ETOH use disorder
3. Edoxaban for Ca-VTE instead of LMWH, maybe not if upper GI malignancy
4. Apixaban as DOAC-max in AF
5. Steroids in CAP to hasten recovery
6. Zolendronate for osteopenia in women 65+

Practice Summary

Things not to Do:

1. Refer for cath if not yet up-titrated on antianginals
2. Aspirin for primary prevention in adults 70 or older, even if diabetic…

Thank you!

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