





#InpatientProblems



#InpatientProblems

#DayTeamProblems



Pyelonephritis Pathway

- [] Urinalysis
- [] Lactic Acid now and again in 4h
- [] CBC
- [] CMP
- [] Blood Cultures x 2
- [] 1g Vancomycin
- [] 3.375g Zosyn
- [] 30 cc/kg Lactated Ringer's IV
- [] Vital Signs Q15 minutes
- [] Admit to Medicine





equinefeather.tumblr



PRINCIPAL'S
OFFICE



Hoofbeats & Heuristics

Overcoming Cognitive
Errors in Medicine

[equinefeather.tumblr](https://www.tumblr.com/equinefeather)



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Shownotes:

tinyurl.com/AAPAhooftbeats



NO FINANCIAL DISCLOSURES

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Diagnostic







Diagnostic

- Anchor
bias

- Search
satisfaction





Diagnostic



Geographic



- Anchor
bias

- Search
satisfaction





Diagnostic

- Anchor
bias

- Search
satisfaction



Geographic

- Availability





Diagnostic

- Anchor
bias

- Search
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Geographic

- Availability

- Confirmation





Diagnostic

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**Self
imposed**











Diagnostic

- Anchor bias

- Search satisfaction



Geographic

- Availability

- Confirmation

- Geography



Self imposed

- Hot hand

- Inexperience

- Fatigue



HOW TO COMBAT IT ?

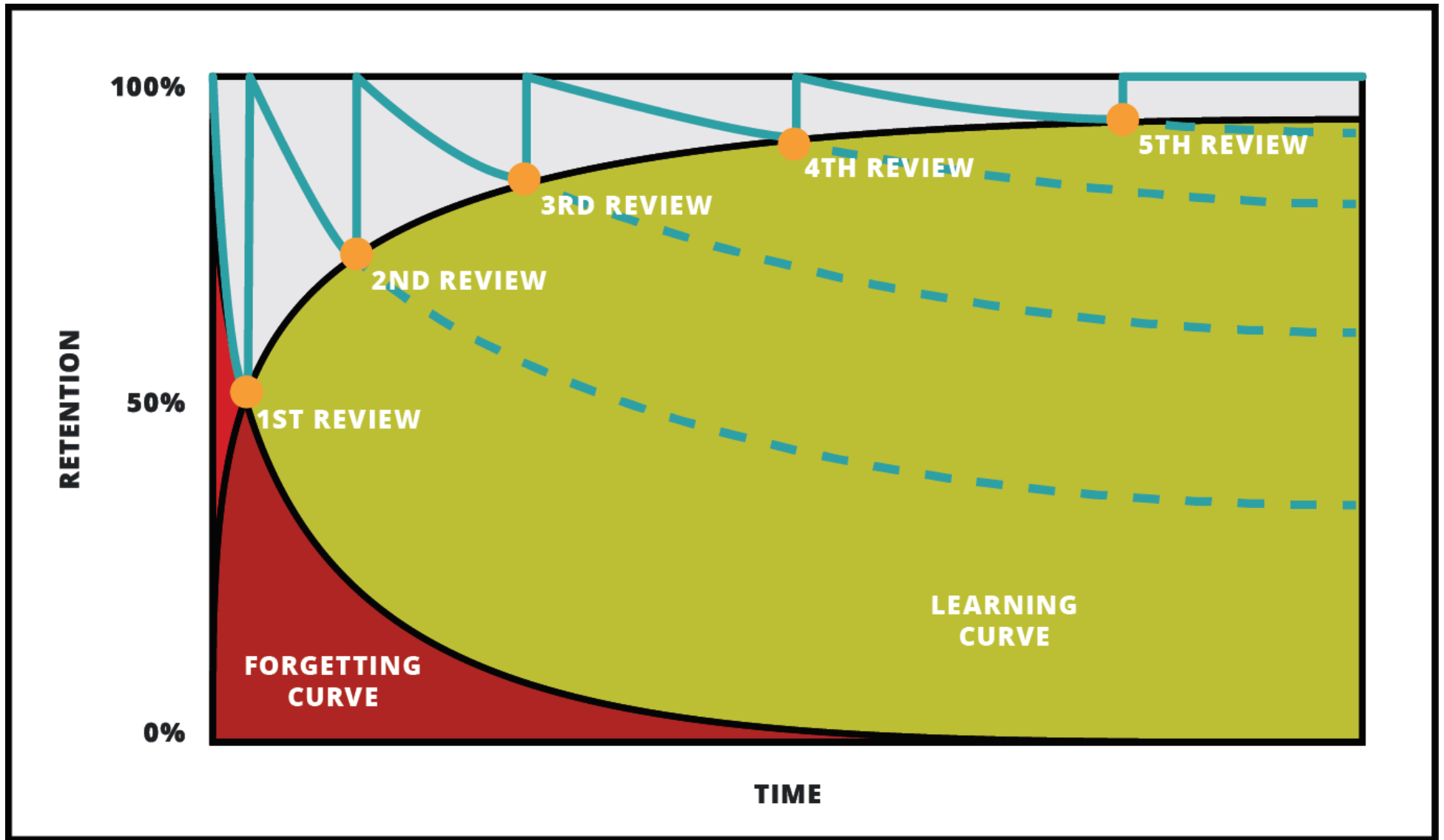


A female soldier in camouflage gear is aiming a rifle with a red dot sight. She has a focused expression. The background shows other soldiers and a field setting with a corrugated metal fence.

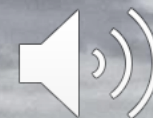
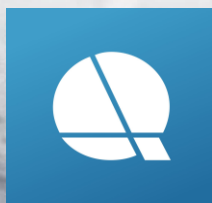
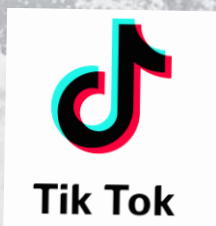
#1 LEARN.

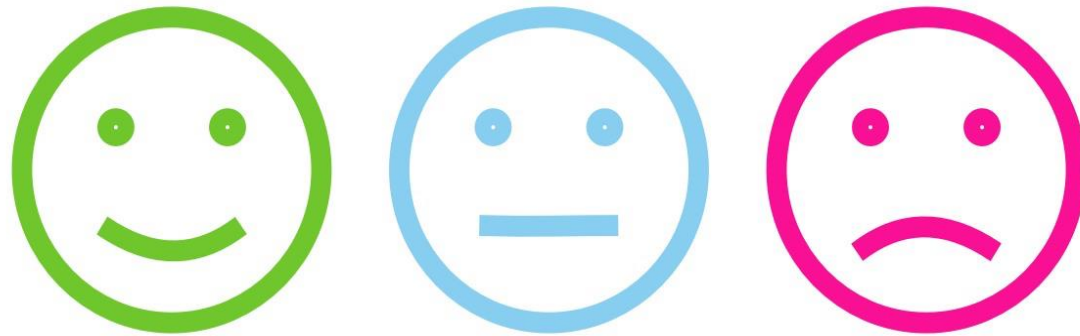
ALWAYS.





#FOAMed





FEEDBACK







#2

Cognitively
offload



CHECKLIST

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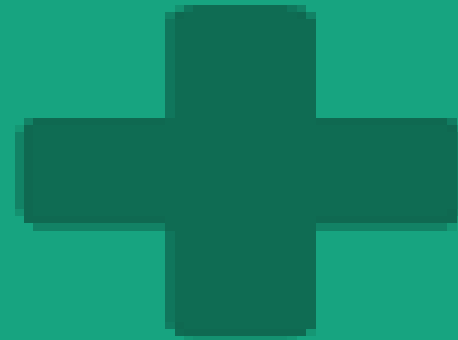
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MD



CALC





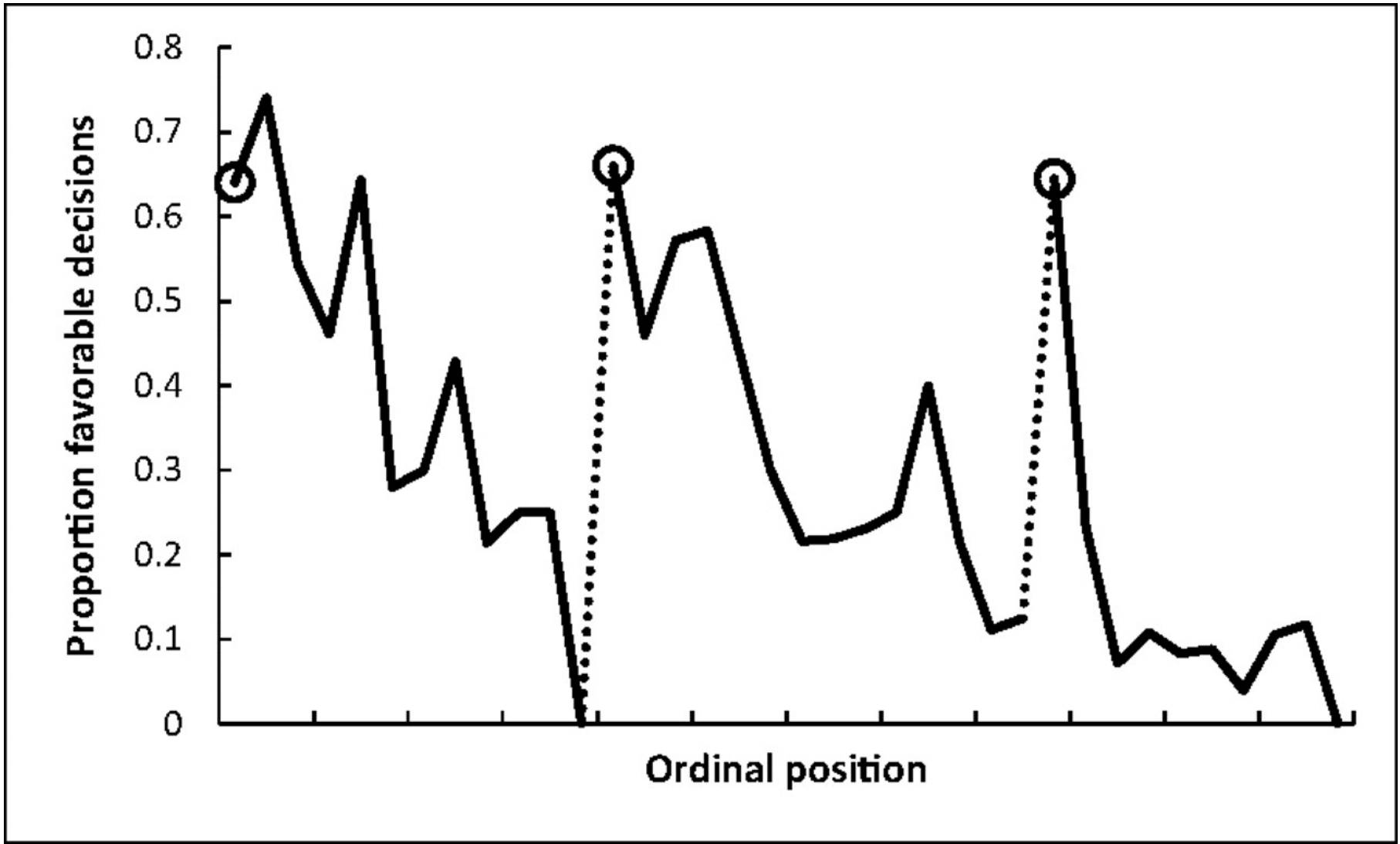


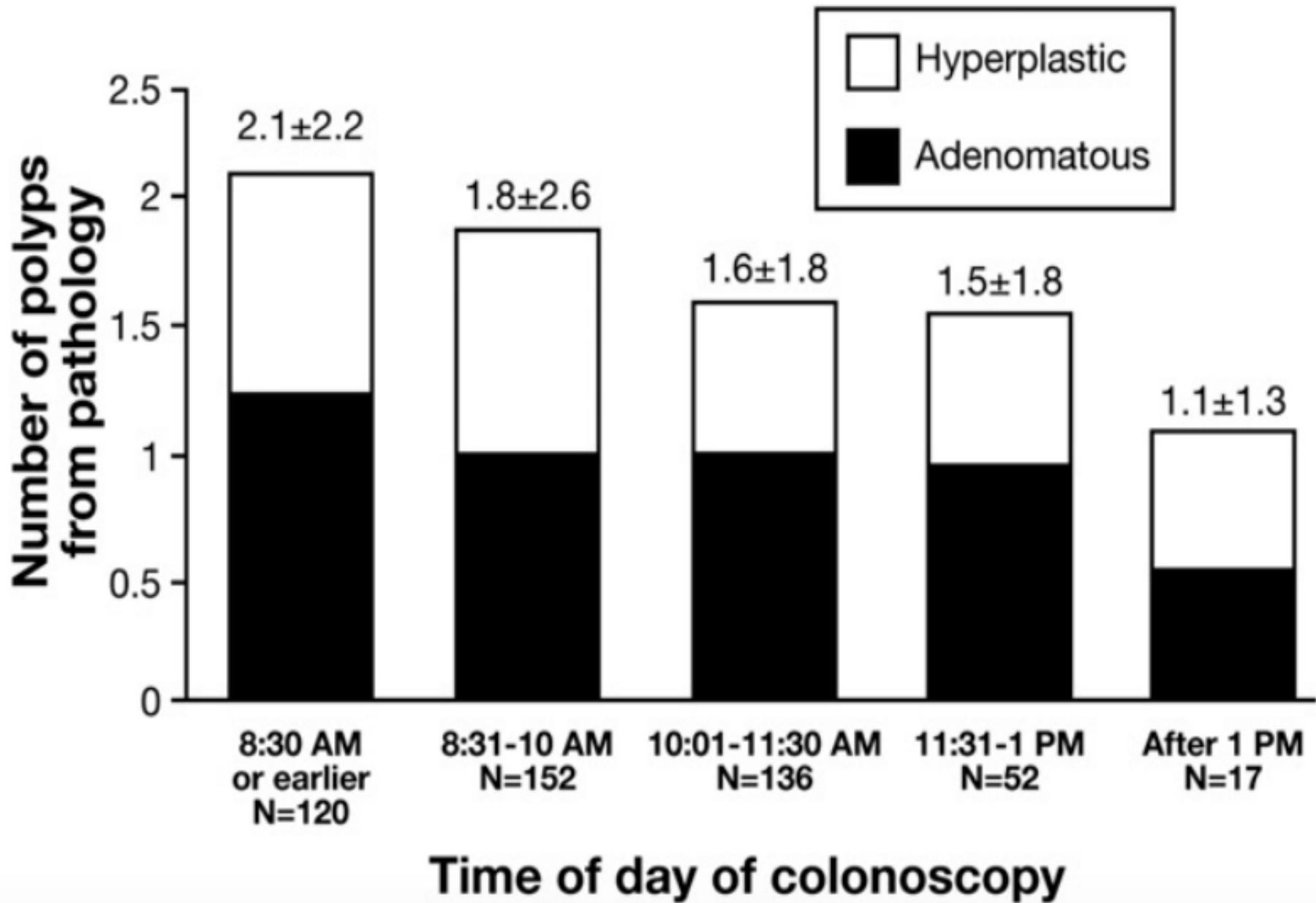


SHOWNOTES AVAILABLE AT:

tinyurl.com/AAPAhoofbeats







*Learn... Always

*Cognitively offload

*Pause & Explain





Diagnostic

- Anchor
bias

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satisfaction

Geographic

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- Geography

Self imposed

- Hot hand

- Inexperience

- Fatigue



Case #1





Diagnostic

- Anchor
bias

- Search
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Geographic

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Self imposed

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Case #2





**levothyroxine
Spironolactone
Dapagliflozin
Wellbutrin**

Case #2



Case #2

Na 139
K 4
CL 102
CO2 15
BUN 22
Cr 1.1
Glu 182
Upreg neg



Case #2

SECOND VISIT:

Na 145

K 3.2

CL 98

CO2 8

BUN 38

Cr 1.9

Glu 189





Diagnostic

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Case #3





Diagnostic

- Anchor
bias

- Search
satisfaction

Geographic

- Availability

- Confirmation

- Geography

Self imposed

- Hot hand

- Inexperience

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*Learn... Always

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Diagnostic

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*Learn... Always

*Cognitively offload

*Pause & Explain





THANK YOU!!

SHOWNOTES:

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FEEL FREE TO REACH OUT!



Heuristics & Hoofbeats: Overcoming Cognitive Errors in Medicine

AAPA 2021

Patrick Bafuma RPAC
Central Coast, CA

Common causes of cognitive errors:

You do not rise to the occasion. You fall to the level of your training.

- Anchor bias
"this feels exactly like my last heart attack." (then missing their cholecystitis)
- Gambler's fallacy / hot hand / past events influence future events
During flu season, pt states, "I have the flu" (then missing their myocarditis)
"I just saw a case like this the other day."
- Availability bias
missed bacteremia in a cirrhotic because you dont see many cirrhotics, or only see them in the ED
- Search satisfaction / confirmation bias
"I found a UTI! we're done." (then miss their endocarditis when the UA grows out Staph Aureus)
- Diagnostic momentum
"All the consultants say its X, so its gotta be X!"
- Geography is destiny
For example, a patient is in COVID unit, so you subconsciously look for reasons to not send to CT since it would take down the CT scanner for an hour for decontamination.
- **FATIGUE**

How to combat them:

Chance favors the prepared mind

- Learn how to learn
-learn to navigate Social Media / blogs, QxMD, EMRAP, etc – ALWAYS push yourself to learn more
-seek feedback & follow up on your patients
-establish a culture of positive/healthy feedback- journal club, chart review, case review
- Cognitive offload. Often.
- frequent breaks, bedside ultrasound, delegate tasks, Mdcalc, & write out a systems based ddx,
- Explain abnormalities and recognize when there may be false positive/negatives
-for example, the beta-blocked patient may not mount a tachycardia.
- Utilize checklists / systems based approach for a broad ddx
-cardiac? CNS? GU? Vascular? Deep space infection? Etc....
- For the weird, wild, and wonderful, some prefer the VINDICATES mnemonic:
VINDICATESS: Vascular, Infection, Neoplastic, Drugs / toxins, Inflammatory / Idiopathic, Congenital, Autoimmune, Trauma, Endocrine / Environmental, Something else / pPsychological

Feel free to contact me!

Pbafuma@gmail.com Twitter @EMinFocus IG: @POCUS_Society

Selected Resources:

https://www.rcpe.ac.uk/sites/default/files/jrcpe_48_3_osullivan.pdf
<https://emergencymedicinecases.com/episode-11-cognitive-decision-making-medical-error/>
<http://www.emdocs.net/cognitiveload/>
<https://link.springer.com/book/10.1007%2F978-3-319-93224-8#toc>