CC: Diarrhea

HPI: 84 yr old woman

- 2 days of non-bloody diarrhea
- AOx1 to name, less responsive
- Very weak, lethargic: unable to walk, mostly bed-bound

- At baseline: AOx2 (name, place) and conversant. Able to walk with FWW.

- Recent admission for pneumonia ~3 weeks ago

- Resides in SNF. RN measured low blood pressure → RN called 911

PMH: HTN, CAD, CKD 3, Dementia

SH: Denied current ETOH, tobacco, or drug use.
Lives at a SNF

ALLERGIES: NKDA

MEDS:
- ASA
- Atorvastatin
- Clopidogrel
- Hydralazine
- Lisinopril
- Lasix
- Senna

PHYSICAL EXAM:

Tmax: 39.1C, **BP:** 75/34 (after 2.5L LR), **HR:** 100, **RR:** 19, **SpO2:** 95% on RA

General: Lethargic woman, opens eyes to voice

HEENT: PERRLA, nonicteric sclera, dry MM, supple neck, no JVD

CV: Tachycardic with regular rhythm, no M/R/G

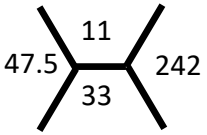
Pulm: unlabored breathing on room air, CTAB

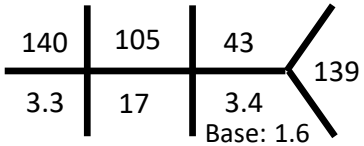
GI: Nondistended, soft, normal bowel sounds, nontender

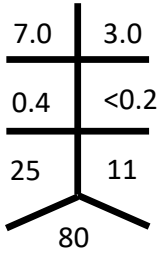
MSK: no edema, pulses 2+, warm extremities

Neuro: A&O x1 (name), lethargic, inconsistently following simple commands

LABS:







Diff: 63.5% PMN, presence of bands

Lactate: 2.0

<u>Blood cultures x2</u>
NGTD

<u>UA</u>
2+ protein
Nitrites: negative
Trace LE
15 WBC / HPF

<u>Urine culture</u>
No growth

<u>CXR:</u>
Unremarkable

<u>Enteric Pathogen Panel</u>
Negative

<u>C. diff</u>
GDH: not detected
Toxin A/B: detected
PCR: Toxigenic C. diff positive

PROBLEM REPRESENTATION:

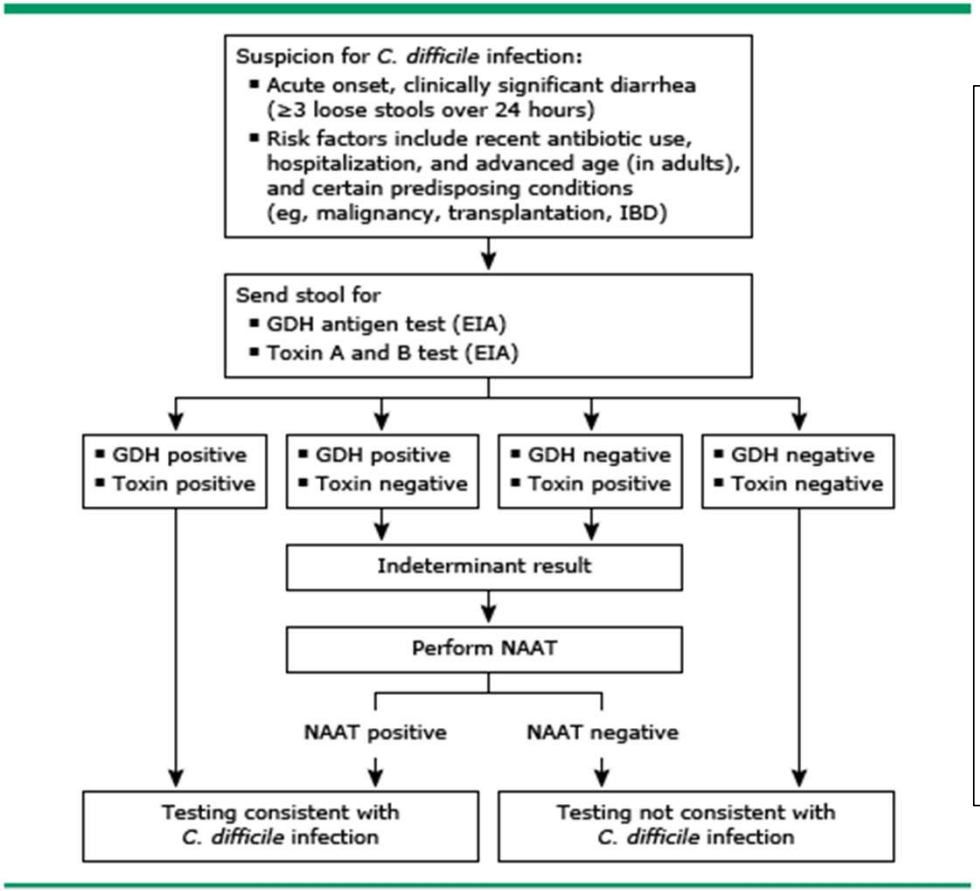
Elderly woman w/ HTN, CKD3, CAD, dementia, recent hospitalization for pneumonia (abx exposure), presenting with acute diarrhea, fevers, and encephalopathy, found to be in septic shock due to…

FULMINANT C. DIFF INFECTION (CDI)

DISEASE SEVERITY

Disease Severity		Diagnostic Criteria
Nonfulminant	**Nonsevere**	WBC ≤ 15k and Cr < 1.5
	Severe	WBC > 15k and Cr ≥ 1.5
Fulminant		Presence of any: Hypotension / Shock, Ileus, Toxic Megacolon

LABORATORY INTERPRETATION



GDH: protein that is present in all C. diff isolates

Toxin A/B: tests for presence of C. diff toxin A/B

NAAT (PCR): tests for presence of toxigenic C. diff (*tcdB* gene)

TREATMENT (2021 IDSA CDI Guideline Update)

<table>
<tr><th colspan="2"></th><th>Initial episode</th><th>1st recurrence</th><th>2nd or subsequent recurrence</th></tr>
<tr><td rowspan="2">Nonfulminant</td><td>Nonsevere</td><td>Fidaxomicin > PO Vanc; Metronidazole is an alterative</td><td rowspan="2">Fidaxomicin > PO Vanc as standard dosing or extended-pulse regimen.

If prior CDI was w/in the last 6 months, adjunctive Bezlotoxumab</td><td rowspan="2">Fidaxomicin > PO Vanc as standard dosing or extended-pulse regimen.

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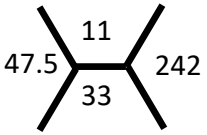

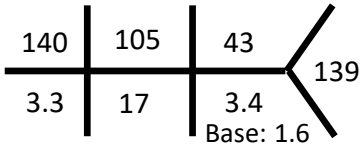

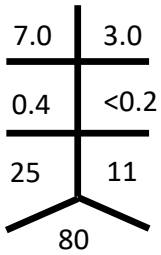

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<u>DIAGNOSIS:</u> FULMINANT C. DIFF INFECTION (CDI)

LEARNING POINTS:

- CDI Disease Severity

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- Treatment (2021 IDSA CDI Updated Guidelines)
  - Fidaxomicin preferred over Vancomycin in Nonfulminant CDI
  - If prior CDI was within the last 6 months: adjunctive Bezlotoxumab