Special Points of Interest:
- Who is Patient ZERO?
- Superzised Shout Out Section this Week!

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Weekly Calendar

1/30: Noon report: Senior Wards orientation
1/31: Noon report: Intern Wards orientation
2/1: Grand rounds: George Smulian, MD: “Diabetes and Infections – Finding the Sweet Spot of Appropriate Treatment” (MSB 5051)
2/2: AHD: Interleaving; Senior Prep: Solid Malignancy
2/3: Noon report: Intern (NRR): Hosp 3; Senior (GI conf room): GI senior

Anonymous Feedback

Our website has a section for anonymous feedback. Think of this like an electronic suggestion box that you can use at any time. The message will be sent directly to Dr. Warm, and is completely anonymous. If you have constructive feedback that you would like to share, please use this tool. The link is: [http://www.med.uc.edu/intmed/residency/internal-medicine/residency-feedback](http://www.med.uc.edu/intmed/residency/internal-medicine/residency-feedback)
Coming soon...

IM Residency Council!
THURSDAY, February 2nd, 5pm
Noon Report Room
Come talk about any concerns or ideas for improvement you may have! We need you!

BOARD REVIEW WITH THE CHIEFS:

Q. A 57 year old previously healthy male on no medication presents to the emergency department with a complaint of severe fatigue. He also notes that in the past week, he’s noted bleeding from his gums when he brushes his teeth. On exam, T 100.1F, HR 95bpm, rr 18/min, and BP is 127/65mmHg. The patient appears tired, with conjunctival pallor, and noted petechiae on extremities. There is no appreciable lymphadenopathy. Labs are obtained and reveal a leukocyte count of 75,000, platelet count 25k, and hemoglobin is 7.8. Renal panel reveals a serum creatinine of 3.7, potassium of 4.9, phosphorous of 6.7, and uric acid of 14. Fibrinogen is normal. There are myelobasts on the peripheral smear. What is your next step in management?

A. Leukapheresis  C. Platelet transfusion
B. Aggressive IV hydration and rasburicase  D. Chemotherapy

A. The correct answer is B, aggressive IV hydration and administration of rasburicase. This patient has spontaneous tumor lysis syndrome related to his underlying AML. This patient is presenting as those with AML do; with signs and symptoms related to his anemia and thrombocytopenia. AML with a leukocyte count of between 25-100k is intermediate risk for the development of TLS. Tumor lysis syndrome is exactly what it sounds like—cells are breaking apart and what used to be in the cells, is now out of the cells; so you get hyperkalemia, hyperphosphatemia, and hyperuricemia. The hyperuricemia results in clogging up of the microvasculature of the kidney and results in renal damage. The electrolyte disturbances can be fatal, and the renal failure can require renal replacement therapy. This patient needs IV fluid and rasburicase for the hyperuricemia. Leukapheresis is indicated in patients with symptomatic leukostasis, which this patient does not have. Platelet transfusion is not indicated in the absence of significant bleeding of count <10k. Chemotherapy without treating first the patient’s TLS puts him at even high risk for worsening electrolyte abnormalities and hyperuricemia and renal failure.
Noon Report Round-up!

Yellow team, led by Leslie Applegate, presented a case of a patient with fever and altered mental status. Let’s talk about it!

Yellow team presented a patient who was admitted with fever and altered mental status, and was found to have bacterial meningitis on LP. When she developed right sided arm and leg weakness that was consistent with spinal etiology, neck imaging revealed that she had cervical osteomyelitis. Interestingly, this patient had been complaining of neck pain for months and had “steroid injections” in her neck to treat this. She also had a history of a clivus chordoma that was resection in the past 6 months.

In case you forgot where the clivus is, it’s highlighted in green to the right. Chordomas are rare and slow growing, but because of their location (can occur anywhere along the spine but are often in the clivus), they can be difficult to resect. They are also relatively radio-resistant and require high doses of radiation to control. They often tend to recur.

<table>
<thead>
<tr>
<th>Complications of vertebral osteomyelitis</th>
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<td><strong>Short-term complications</strong></td>
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<tr>
<td>Epidural abscess, subdural abscess, meningitis</td>
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<tr>
<td>Paraspinal abscess and extension (including psoas, retropharyngeal, mediastinal, subphrenic, retroperitoneal abscesses, or empyema)</td>
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<tr>
<td>Extension of infection involving the aorta and/or vena cava</td>
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<tr>
<td>Spinal cord and/or nerve root impingement with neurological consequences</td>
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<tr>
<td>Vertebral body collapse</td>
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<td>Endocarditis*</td>
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Delays in diagnosis often lead to disabling complications, so keep a high suspicion for this disease process. In the modern age of antibiotics, the mortality due to vertebral osteomyelitis is less than 5%, and the rate of neurological complications is less than 7%.

We often struggle with what to do once we have MRI evidence of vertebral osteomyelitis...start antibiotics? Wait for cultures? Wait for neurosurgery to help us? An algorithmic approach suggests that we use 2 things to help us in our decisions; is the patient septic, and do they have neurological deficits, cord compression, or epidural abscesses? If the patient has neurological deficits, you should proceed to surgery and obtain intraoperative cultures and direct your therapy based on that. If the patient doesn’t have focal neurological deficits but has sepsis, you should (obviously) provide empiric therapy and tailor depending on blood cultures. At any time, you can direct your therapy against whatever grows in the blood cultures. For patients who have no neurologic compromise, are not septic, and don’t have positive blood cultures, you should pursue biopsy for culture and direct therapy based on that.
Weekend to-do!


**Sunday:** International Holocaust Remembrance Day, 4-6 p.m., Hebrew Union College Skirball Museum, 3101 Clifton Ave., Clifton. Mayerson Hall. Free. Reservations recommended.


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**SHOUT OUTS!!!**

- To **Betsy Larder, Joe Cooley, and Megan Caroway** who are on Geriatrics this month and are “engaged during Wednesday morning teaching and did awesome, thorough admissions to Maple Knoll Village!”
- To **Greg Wigger, Matt Lambert, and Bo Franklin** for graciously taking jeopardy shifts during the great GI virus apocalypse!
- To **Caroline Lee and Katie Broderick** for covering teams sans-residents during the apocalypse!
- To **Eric Cohen** for offering his extraordinary senior services in case we ran out of jeopardy!
- To **Devon Carr, Greg Wigger, and Bo Franklin** for taking long call without any interns!
- To **Scott Merriman and Joe Cooley** for having their posters accepted to ATS this spring!
- To **Devon Carr, Leslie Applegate, Tim Lee, Scott Merriman, Patricio Alzamora, Danny Peters, Kantha Medepalli, and Beverly Srinivasan** for a great game of AHD Jeopardy during Weesner Prep this week! Special shout-out to the winners Devon, Tim, and Leslie!
- To Renal team interns **Sarah Weiskittel and Connie Fu**, and students Nischelle and Carolyn for “making their senior’s birthday awesome despite how crazy hectic the day was, and for discharging 9 patients like bosses despite Academic Half Day!” from a grateful senior.
- To all the **VA seniors and interns**, from Dr. Ohlbaum in the VA ED: “Just wanted to let you know that in past few days, with and despite all the illness and how busy we have been, we have all felt that your residents are pulling together and everyone has been great to work with.” Thank you guys for your hard work!

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**TRIVIA**

First correct answer wins a $5 Starbucks gift card!

What is your presumptive diagnosis and what study do you order to confirm your suspicion?

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Congrats to Javy Baez for correctly guessing “Match Day” for the above Applicant Pictionary clue!