Introduction

- This first review set contains 70 keyword slides.

- The goal would be to spend 90s or less per slide (some will take < 30s).

- Strongly encourage making notes with each slide. Study these notes for your shelf. Writing stuff down will help tremendously with retention.

- Designed to be a more comprehensive but HY medicine shelf review.

- Make sure you do all 4 practice NBMEs for the medicine shelf. If a topic is completely new to you, spend about 10 mins studying that topic as something similar may be tested on the shelf.

- The medicine shelf is surprisingly not a huge departure from a lot of the material tested from the organ systems on Step 1. We will review some of this pertinent stuff.
1

Opening snap with diastolic rumble at left 4th interspace. Tall jugular venous A waves. How can we increase the intensity of this murmur?
Elevated AST/ALT, blistering lesions on the dorsum of the hands, severe hirsutism. What is the enzyme deficiency? How is this disease treated?
Hypoglycemia, hypoglycemic sx, resolution with glucose administration. Differentiating 3 big causes of hypoglycemia based on labs. The acute treatment of hypoglycemia.
4A Diarrhea (Bugs, associations, treatment)

Pork consumption, Undercooked shellfish, Severe rice-water stools in a developing country, Bloody diarrhea with a super small inoculum, Bloody diarrhea after consuming eggs/poultry, Watery diarrhea 2 hrs after consuming potato salad, Bloody diarrhea with low plts/unconjugated hyperbilirubinemia/elevated creatinine.
4B Diarrhea (Bugs, associations, treatment)

Diarrhea upon return to the US from Mexico, Foul smelling watery diarrhea after recent treatment for an anaerobic bacterial pneumonia, Crampy abdominal pain after consumption of home canned veggies, Bloody diarrhea with ascending paralysis in a puppy owner, Watery diarrhea after eating fried rice at a Chinese restaurant.
Prussian blue staining of a bone marrow smear reveals basophilic inclusions around the nucleus in a 75 yo M that lives in a home built in the 1930s. What are the associated Fe lab values? How is this disease treated (+ potentially helpful vitamin supplementation)?
CXR showing diffuse, bilateral, ground glass infiltrates in a febrile patient taking high dose immunosuppressants. What is the bug? Relevant stain? Prophylaxis? Treatment? Who should get concomitant steroids? Diagnostic studies? Classically elevated marker from pulmonary fluid?
7 (Associations/Relevant Bugs/Risk factors)

Flank pain with gross hematuria. Envelope shaped? Coffin shaped? Radiolucent? Shaped like a hexagon? What is the best diagnostic testing modality? How is this presentation treated?
24 yo M presents with a painless, palpable bony mass on the left knee. Knee X ray reveals a contiguous mushroom shaped mass. What is the diagnosis?
66 yo F is found unconscious at home by her daughter in December. PE is notable for a cherry red appearance of the skin. Next best step in diagnosis? Treatment modalities? Pathophysiology and O2 delivery associations? Classic exam presentation and risk factors?
Elevated creatinine 24 hrs after getting a CT scan. How could this have been prevented? Skin fibrosis after getting a brain MRI. Is there a particular DM medication that should be held before getting a CT scan?
A common lower extremity side effect associated with hydralazine and Ca channel blockers. What is the pathophysiology? How is this condition treated? What is the pathophysiological mechanism?
HIV patient with a 3 day history of fever presents with targetoid skin lesions, lip/mouth ulcerations, and visual impairment. PE is notable for skin sloughing (8% BSA). Nikolsky sign is +ve. He was placed on Allopurinol 10 days ago for chronic gout. What is your diagnosis? > 30% BSA involvement?
30 yo F presents with 3 day hx of polydipsia and polyuria. Blood glucose is 650 mg/dl, Bicarb is 21, pH is 7.35. Diagnosis? Pathophysiology? Risk factors? Treatment? Na balance? K balance? What is your dx if the patient becomes altered/comatose with rapid treatment?
49 yo F presents with wheezing and flushing. PE is +ve for murmurs consistent with tricuspid regurgitation and pulmonic stenosis. Diagnosis? Diagnostic steps? Treatment (pharmacology)? Symptoms by location? Pellagra?
61 yo M presents with exertional dyspnea. CBC is notable for a Hct of 27%. What is the next best step in management? What would Fe studies dictate? What is our primary concern? When should transfusion be explored? What would your diagnosis be if the patient had a similar presentation and difficulty swallowing?
29 yo F with a recent trip to India (ate local foods). Returned 2 weeks ago and initially had fevers for 1 week. Now presents with severe abdominal pain and distension. PE is notable for salmon colored circular lesions on the trunk. Diagnosis? Treatment?
Septic arthritis -> what is the bug? (+most common cause, + in a sickle cell patient, + in a young F with purpuric skin lesions). Diagnostic step? Findings from diagnostic steps? Treatment (2 pronged approach). The Neisseria vs Chlamydia treatment difference.
Subconjunctival hemorrhage in a patient with nasty coughing episodes. Diagnosis? Treatment? Prophylaxis for close contacts? What would the next step in management be in a person that recently started Ramipril for the treatment of HTN who has a cough?
Reviewing first, second, and third degree AV blocks. Acute management in a symptomatic patient? Contraindicated medications? Who gets a pacemaker??
Reduced EF in a patient with coarse facial features and enlarging fingers. Diagnosis? Diagnostic steps (3)? Treatment options? Most common cause of death?
Dysphagia to solids and liquids in a patient with thick/thin blood smears (Giemsa) revealing what appears to be motile parasites. Diagnosis? Diagnostic steps (2)? Pathophysiology? Surgical/Non-Surgical treatment options? Potential sequelae of treatment/disease sequelae?
Reduced MCV in a patient with a long history of untreated rheumatoid arthritis. Diagnosis? What would the results of a CBC/Fe studies indicate? Pathophysiology?
25 yo M with nasal packing presents with a BP of 65/40, elevated Cr, respiratory distress, T of 104, and marginally elevated troponins. Diagnosis? Pathophysiology? Classic bug associations (2)? Treatment strategies?
Rb gene mutations, Paget’s disease, and Teriparatide administration increase risk of what primary bone malignancy? Associated radiological features?
Aspirin Exacerbated Respiratory Disease. Potential pathophysiology? Classic presentation? Treatment
<table>
<thead>
<tr>
<th>COMPONENTS OF SEVERITY</th>
<th>CLASSIFICATION OF ASTHMA SEVERITY ≥ 12 YEARS OF AGE*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INTERMITTENT</td>
</tr>
<tr>
<td>Impairment</td>
<td></td>
</tr>
<tr>
<td>Symptoms</td>
<td>≤ 2 days per week</td>
</tr>
<tr>
<td>Nighttime awakenings</td>
<td>≤ 2 times per month</td>
</tr>
<tr>
<td>Short-acting beta agonist use for symptom control (not for prevention of exercise-induced bronchospasm)</td>
<td>≤ 2 days per week</td>
</tr>
<tr>
<td>Interference with normal activity</td>
<td>None</td>
</tr>
<tr>
<td>Lung function</td>
<td>Normal FEV₁ between exacerbations; FEV₁ ≥80 percent of predicted; FEV₁/FVC normal</td>
</tr>
<tr>
<td>Risk</td>
<td>Exacerbations requiring oral systemic corticosteroids</td>
</tr>
</tbody>
</table>

Consider severity and interval since last exacerbation; frequency and severity may fluctuate over time for patients in any severity category; relative annual risk of exacerbations may be related to FEV₁.
Aspirin Exacerbated Respiratory Disease. Potential pathophysiology? Classic presentation? Treatment
Classic EKG presentation of a Supraventricular Tachycardia. Stepwise management of an SVT. What is the next best step in management if a patient has an SVT but is hemodynamically unstable? What is the most common EKG finding in a patient having a pulmonary embolus?
18 yo F presents with scaly, erythematous upper extremity lesions. She has a long history of allergic rhinitis. What is your diagnosis? How is this treated? What would your diagnosis be if these lesions also had umbilicated vesicles? How would this be treated? What is the classic CBC finding with these diagnoses?
A patient presents with the classic “stones, bones, groans, and psychic overtones”. PE is notable for skin tenting. What is the FIRST step in management? A quick overview of Ca pharmacology.
Alpha vs Beta Thalassemias. Pathophysiology. Compare and contrast (C/C) beta vs alpha thalassemia minor in terms of Hb electrophoresis results. C/C beta vs alpha thalassemia major in terms of presentation onset and Hb electrophoresis results. What is Hb H disease? What is Hb Barts? What is the classic smear finding in thalassemias?
Classic CBC findings in hemolytic anemias. Classic “gallbladder” pathology present in patients with hemolytic anemias. These patients are at risk of aplastic crises with what bug? Do thalassemias present as a microcytic, normocytic, or macrocytic anemia?
Periorbital edema, hematuria, and HTN in a patient with a recent history of cellulitis. BUN and Cr are elevated. Diagnosis? Pathophysiology? Associated antibodies? This disease reflects what kind of hypersensitivity reaction?
11:22 translocation, X-Ray imaging reveals an “onion skin like” periosteal reaction, bone biopsy with histology reveals small, round, blue cells. What is your diagnosis?
What is a parapneumonic effusion (PNE)? Describe the following—Uncomplicated PNE, Complicated PNE, Empyema. What are the pH, LDH, glucose, and micro criteria that typify a “high risk” PNE? How do the available treatment modalities help you differentiate between the different parapneumonic effusion types?
What is your diagnosis? How would you describe the rhythm? How would treat this rhythm in a patient that is stable/asymptomatic vs a patient that is hemodynamically unstable vs a patient that lacks a pulse? What is the most common cause of death in the immediate period following an MI?
Oral mucosal ulcerations + +ve Nikolsky sign (flaccid skin blisters) in a 45 yo M. Diagnosis? Pathophysiology? Type of hypersensitivity reaction? Diagnostic testing modality (super HY)? Treatment strategy?
Cold vs Warm Agglutinins (classic antibodies, bug associations). Treatment differences b/w warm and cold agglutinin disease. LDH, Bilirubin, and Haptoglobin levels in hemolytic anemia.
Synpharyngitic glomerulonephritis. Compare and contrast with Post Infectious Glomerulonephritis wrt to-
Timeline to onset of symptoms, complement levels, etc. Treatment strategies. Classic urine findings with the nephritic syndromes.
70 yo M with leg pain that is worsened by a back held in extension (but better when held in flexion). Diagnosis? Diagnostic testing? Treatment strategies?
Opening snap with a diastolic rumble heard best in the 4th intercostal space in the midclavicular line. Diagnosis? #1 risk factor? Diagnostic testing? Treatment strategies?
No oral mucosal lesions + Pruritus + Negative Nikolsky sign. Diagnosis? Pathophysiology? Best diagnostic test? Treatment strategies (contrast with initial management of the somewhat analogous Nikolsky +ve disease)?
Compare and contrast primary and secondary adrenal insufficiency (by classic cause, skin findings, levels of ACTH/Aldosterone/Renin, Cosyntropin testing, treatment strategy). Key labs/CBC findings in AI. AI with a history of nuchal rigidity and purpuric skin lesions. Discussion of adrenal physiology. Stress Steroid Dosing.
69 yo M with fever, leukocytosis, and LLQ pain. Diagnosis? Pathophysiology? Diagnostic testing? Contraindicated initial studies? GI Antibiotic strategies on the NBME (2)? What is your diagnosis if this patient presents weeks later with recurrent UTIs with urinalysis revealing air and fecal material?