

2020 Internal Medicine Review Course Syllabus

Allergy & Immunology:

Page 13, Asthma — “Rule of 2s”

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|---|
| <ul style="list-style-type: none"> • Control <ul style="list-style-type: none"> – Degree to which the manifestations of asthma are minimized and the goal of therapy are met – <u>Impairment</u>: Symptom frequency <ul style="list-style-type: none"> • > 2× daily symptoms per week • > 2× nightly symptoms per month • > 2× need for short-acting β-agonist – <u>Risk</u>: Morbidity <ul style="list-style-type: none"> • > 2× emergency department visits or hospitalizations per year | <ul style="list-style-type: none"> • Control <ul style="list-style-type: none"> – Degree to which the manifestations of asthma are minimized and the goal of therapy are met – <u>Impairment</u>: Symptom frequency <ul style="list-style-type: none"> • > 2× daily symptoms per week • > 2× nightly symptoms per month • > 2× weekly need for short-acting β-agonist – <u>Risk</u>: Morbidity <ul style="list-style-type: none"> • > 2× emergency department visits or hospitalizations per year |

Allergy & Immunology:

Page 19, Immunodeficiencies

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|---|
| Congenital Agammaglobulinemia <ul style="list-style-type: none"> – a.k.a. Bruton’s or X-linked – Mutation in Bruton tyrosine kinase → Arrested B-cell development – Recurrent sinopulmonary and ear infections – Encapsulated organisms <ul style="list-style-type: none"> ○ <i>Staphylococcus</i>, <i>Streptococcus</i>, <i>Meningococcus</i>, <i>Hemophilus</i> – Enteroviral infection; giardia infection – Diagnosis: No antibodies; no B cells – Treatment: IVIG or SQIG ± prophylactic antibiotics | Congenital Agammaglobulinemia <ul style="list-style-type: none"> – a.k.a. Bruton’s or X-linked – Mutation in Bruton tyrosine kinase → Arrested B-cell development – Recurrent sinopulmonary and ear infections – Encapsulated organisms <ul style="list-style-type: none"> ○ <i>Staphylococcus</i>, <i>Streptococcus</i>, <i>Meningococcus</i>, <i>Haemophilus</i> – Enteroviral infection; Giardia infection – Diagnosis: No antibodies; no B cells – Treatment: IVIG or SQIG ± prophylactic antibiotics |

Allergy & Immunology:

Page 19, Immunodeficiencies

| Text currently reads: | Text should read: |
|---|---|
| <p>Common Variable Immunodeficiency</p> <ul style="list-style-type: none"> • Failure on B-cell maturation into plasma cells • Recurrent sinopulmonary and ear infections – Encapsulated organisms <ul style="list-style-type: none"> ○ <i>Staphylococcus</i>, <i>Streptococcus</i>, <i>Meningococcus</i>, <i>Hemophilus</i> • Bronchiectasis • Enteroviral infection; giardia infection • Increased risk of autoimmune disease and malignancy • Diagnosis: low IgG with low IgA or low IgM; low B cells • Treatment: IVIG or SQIG ± prophylactic antibiotics | <p>Common Variable Immunodeficiency</p> <ul style="list-style-type: none"> • Failure on B-cell maturation into plasma cells • Recurrent sinopulmonary and ear infections – Encapsulated organisms <ul style="list-style-type: none"> ○ <i>Staphylococcus</i>, <i>Streptococcus</i>, <i>Meningococcus</i>, <i>Haemophilus</i> • Bronchiectasis • Enteroviral infection; <i>Giardia</i> infection • Increased risk of autoimmune disease and malignancy • Diagnosis: low IgG with low IgA or low IgM; low B cells • Treatment: IVIG or SQIG ± prophylactic antibiotics |

Allergy & Immunology:

Page 20, Audience Response Answers and Explanatory Information — AR 4

| Text currently reads: | Text should read: |
|--|---|
| <p>Explanation: The correct answer is D.</p> <p>The patient most likely developed contact dermatitis from poison oak/ivy, consistent with a Type 4 delayed hypersensitivity reaction.</p> <p>A. Type 1: Describes IgE-mediated reactions like anaphylaxis.</p> <p>B. Type 2: Describes immunoglobulin- or antibody-mediated reactions like idiopathic/immune thrombocytopenic purpura.</p> <p>C. Type 3: Describes immune complex (antibody:antigen)-mediated disorders like serum sickness.</p> <p>D. Type 4: Describes delayed cell-mediated immune reactions like contact dermatitis.</p> | <p>Explanation: The correct answer is D.</p> <p>The patient most likely developed contact dermatitis from poison oak/ivy, consistent with a Type 4 delayed hypersensitivity reaction.</p> <p>A. Type 1: Describes IgE-mediated reactions like anaphylaxis.</p> <p>B. Type 2: Describes immunoglobulin- or antibody-mediated reactions like immune thrombocytopenic purpura (ITP; formerly idiopathic thrombocytopenic purpura).</p> <p>C. Type 3: Describes immune complex (antibody:antigen)-mediated disorders like serum sickness.</p> <p>D. Type 4: Describes delayed cell-mediated immune reactions like contact dermatitis.</p> |

Allergy & Immunology:**Page 21, Audience Response Answers and Explanatory Information — AR 10**

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|---|--|
| <p>Explanation: The correct answer is C. This vignette describes a classic case of serum sickness.</p> <p>A. Type 1: Describes IgE-mediated reactions like anaphylaxis.</p> <p>B. Type 2: Describes immunoglobulin- or antibody-mediated reactions like idiopathic/immune thrombocytopenic purpura.</p> <p>C. Type 3: Describes immune complex (antibody:antigen)-mediated disorders like serum sickness.</p> <p>D. Type 4: Describes cell-mediated immune reactions like celiac disease.</p> | <p>Explanation: The correct answer is C. This vignette describes a classic case of serum sickness.</p> <p>A. Type 1: Describes IgE-mediated reactions like anaphylaxis.</p> <p>B. Type 2: Describes immunoglobulin- or antibody-mediated reactions like immune thrombocytopenic purpura.</p> <p>C. Type 3: Describes immune complex (antibody:antigen)-mediated disorders like serum sickness.</p> <p>D. Type 4: Describes cell-mediated immune reactions like celiac disease.</p> |

Cardiology:**Page 30, Hyperlipidemia > In CAL the HIGH DR was MODERN!**

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|---|--|
| <p>* Continue statins persons > 75 years of age who have clinical ASCVD and are tolerating statin therapy</p> <p>\$ if HIGH intensity contraindicated/side effects, try moderate-intensity statin therapy</p> <p>% if 10-yr ASCVD risk \geq 20 use HIGH-intensity statin</p> <p># Nonstatin Rx: 1st ezetimibe (10 mg) inhib. chol. intestinal absorb.; If LDL not lowered 50%, consider ezetimibe + statin with long half-life 1–3 times/wk; e.g., rosuvastatin 20 mg twice/wk</p> <p>2nd PCSK9 inhibitor (evolocumab, alirocumab)</p> <p>@ Also consider bile acid sequestrants (colesevelam, cholestyramine, colestipol)</p> | <p>* Continue statins persons > 75 years of age who have clinical ASCVD and are tolerating statin therapy</p> <p>\$ if HIGH intensity contraindicated/side effects, try moderate-intensity statin therapy</p> <p>% if 10-yr ASCVD risk \geq 20 use HIGH-intensity statin</p> <p># Nonstatin Rx: 1st ezetimibe (10 mg) inhib. chol. intestinal absorb.; If LDL not lowered 50%, consider ezetimibe + statin with long half-life 1–3 times/wk; e.g., rosuvastatin 20 mg twice/wk</p> <p>2nd PCSK9 inhibitor (evolocumab, alirocumab).</p> <p>If elevated triglyceride levels despite statin therapy, and cardiovascular disease or diabetes and multiple other risk factors, add icosapent ethyl (highly purified fish oil).</p> <p>@ Also consider bile acid sequestrants (colesevelam, cholestyramine, colestipol)</p> |

Cardiology:**Page 41, AR 14**

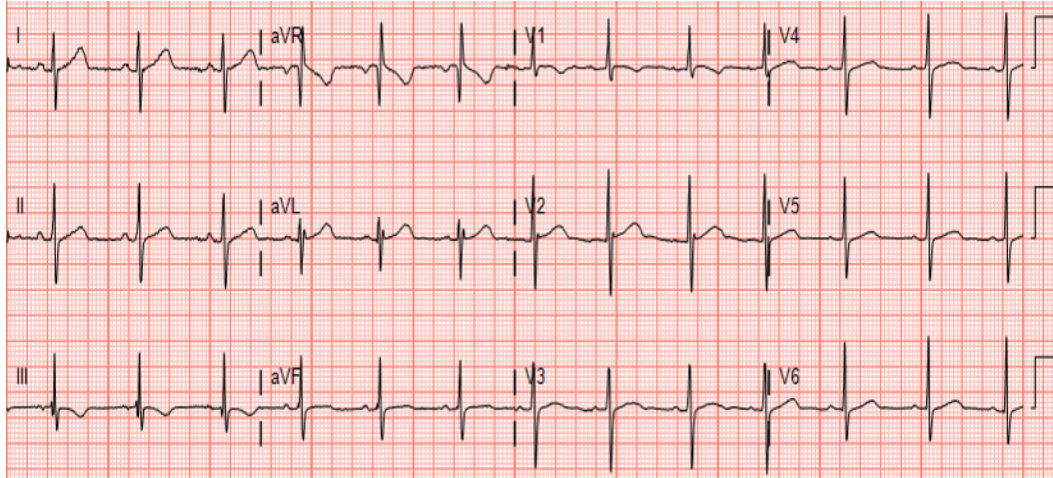
| <i>Text currently reads:</i> | <i>Text should read:</i> |
|---|--|
| <p>A 51 yo man with MR is inactive and has a desk job. He denies symptoms. He watches movies and drinks beer on weekends.</p> <p>PE: BMI 32 kg/m², BP 115/70 mmHg, pulse 80 bpm.</p> <p>CVS: PMI diffuse 5th ICS midclavicular line and forceful, with a grade 4/6 systolic murmur heard loudest at apex, radiating to the axilla.</p> <p>CXR: Prominent LV ECG: NSR, LAE, borderline LVH</p> <p>TTE: Thickened myxomatous mitral valve, severe mitral regurgitation; EF 45%; LV end-systolic dimension = 4.8 cm.</p> | <p>A 51 yo man with MR is inactive and has a desk job. He denies symptoms. He watches movies and drinks beer on weekends.</p> <p>PE: BMI 32 kg/m², BP 115/70 mmHg, pulse 80 bpm.</p> <p>CVS: PMI diffuse 5th ICS midclavicular line and forceful, with a grade 4/6 systolic murmur heard loudest at apex, radiating to the axilla.</p> <p>CXR: Prominent LV; ECG: NSR, LAE, borderline LVH</p> <p>TTE: Thickened myxomatous mitral valve, severe mitral regurgitation; EF 45%; LV end-systolic dimension = 4.8 cm.</p> |

Cardiology:**Page 52, AR 19**

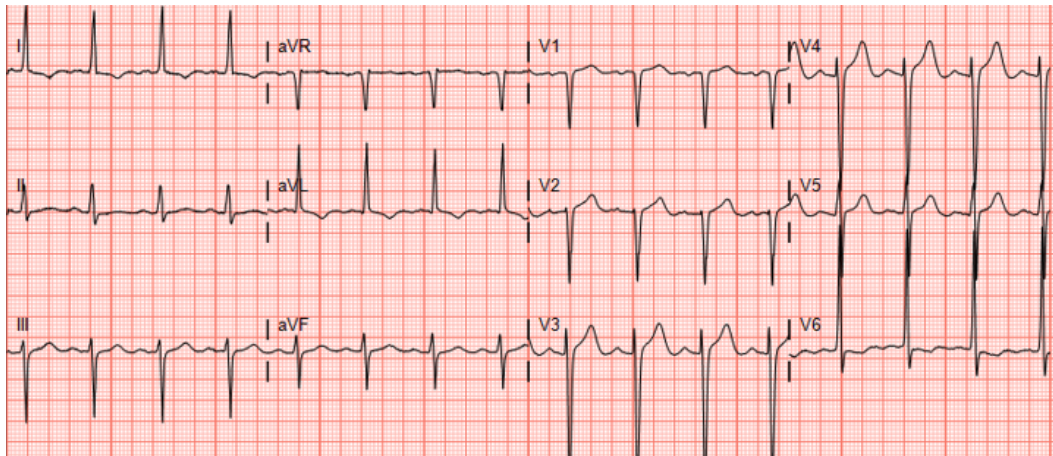
| <i>Text currently reads:</i> | <i>Text should read:</i> |
|---|--|
| <p>A 59 yo Hispanic male patient had a large anterior STEMI 1 year ago, LVEF 15%, s/p 3-V CABG. He is retired, paints, and does other activities of daily living.</p> <p>Meds: Carvedilol, valsartan/sacubitril, aspirin, clopidogrel, furosemide, eplerenone, and atorvastatin. Physical: HR 70 bpm, BP 125/85 mmHg, R 16 breaths/min</p> <p>CVS: S1 S2 S3</p> <p>LUNGS: CTA Extremities: < 1 mm pedal edema;</p> <p>ECG: NSR 70 bpm, old anterolateral MI</p> <p>Echo (1 month ago): LVEF 29%, anterolateral hypokinesis, moderately dilated left vent</p> | <p>A 59 yo Hispanic male patient had a large anterior STEMI 1 year ago, LVEF 15%, s/p 3-V CABG. He is retired, paints, and does other activities of daily living.</p> <p>Meds: Carvedilol, valsartan/sacubitril, aspirin, clopidogrel, furosemide, eplerenone, and atorvastatin. Physical: HR 70 bpm, BP 125/85 mmHg, R 16 breaths/min</p> <p>CVS: S1 S2 S3</p> <p>LUNGS: CTA bilaterally;</p> <p>Extremities: < 1 mm pedal edema;</p> <p>ECG: NSR 70 bpm, old anterolateral MI</p> <p>Echo (1 month ago): LVEF 29%, anterolateral hypokinesis, moderately dilated left vent</p> |

Cardiology:
Page 69, Left Axis Deviation

ECG currently shows:

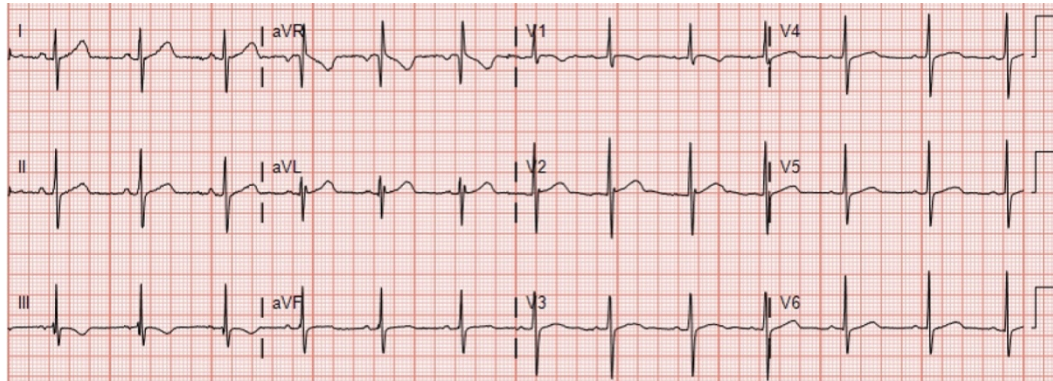


ECG should show:

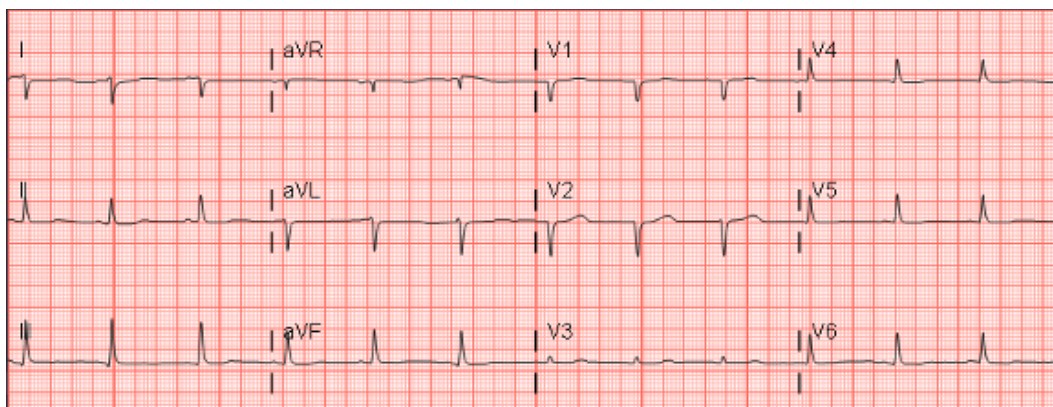


Cardiology:
Page 69, Right Axis Deviation

ECG currently shows:



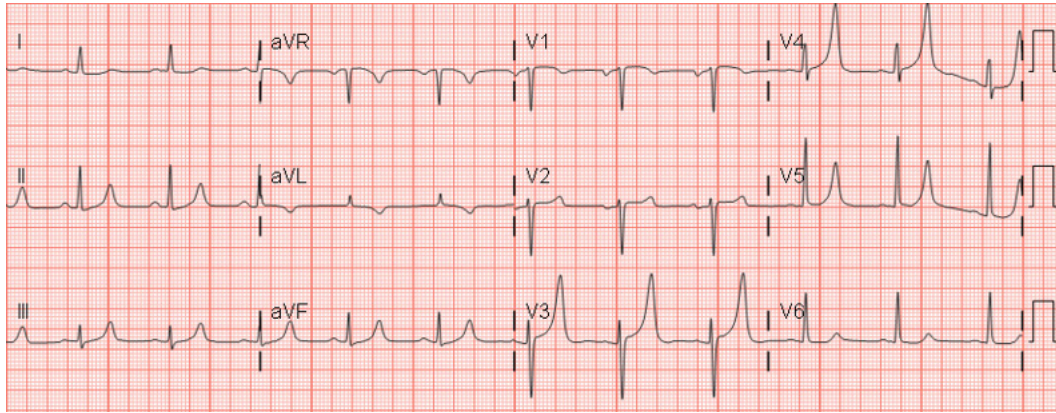
ECG should show:



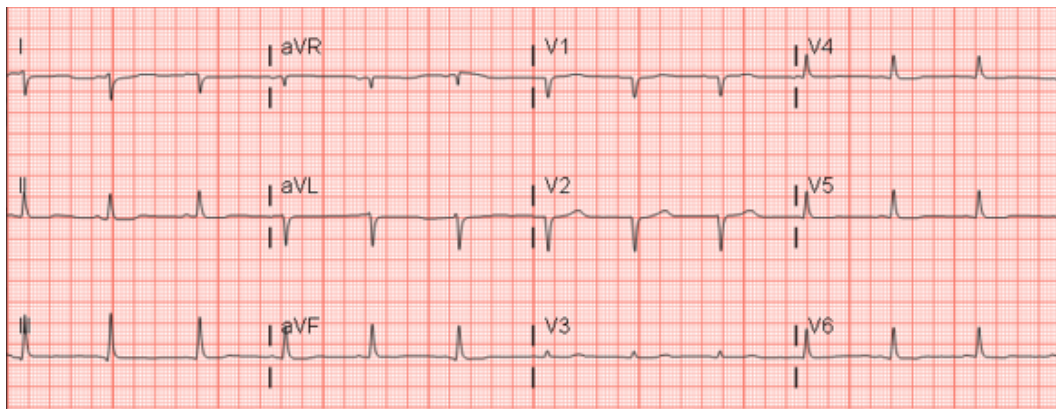
Cardiology:

Page 73, Wolff-Parkinson-White Pattern (Preexcitation)

ECG currently shows:



ECG should show:



Dermatology:

Page 7, Acne Vulgaris

| Text currently reads: | Text should read: |
|---|---|
| <ul style="list-style-type: none"> • Affects 85% of adolescents • 12% of women continue to get lesions through their 40s • Predisposing factor is hyperresponsiveness to androgens (e.g., polycystic ovary syndrome) • Main types: <ul style="list-style-type: none"> – Comedonal (noninflammatory) <ul style="list-style-type: none"> • Occlusion of follicles – Inflammatory (papulopustular) <ul style="list-style-type: none"> • Directed against <i>Propionibacterium acnes</i>, excess sebum around hair follicle, follicular plugging • Severe nodulocystic (know isotretinoin) | <ul style="list-style-type: none"> • Affects 85% of adolescents • 12% of women continue to get lesions through their 40s • Predisposing factor is hyperresponsiveness to androgens (e.g., polycystic ovary syndrome) • Main types: <ul style="list-style-type: none"> – Comedonal (noninflammatory) <ul style="list-style-type: none"> • Occlusion of follicles – Inflammatory (papulopustular) <ul style="list-style-type: none"> • Directed against <i>Propionibacterium acnes</i>, excess sebum around hair follicle, follicular plugging – Severe nodulocystic (know isotretinoin) |

Dermatology:

Page 13, Erythema Multiforme (EM)

| Text currently reads: | Text should read: |
|--|--|
| <ul style="list-style-type: none"> • 2 types <ol style="list-style-type: none"> 1) EM minor <ul style="list-style-type: none"> • No systemic symptoms • No mucosal involvement 2) EM major <ul style="list-style-type: none"> • Systemic symptoms present • Mucosal involvement severe • Acute, target lesions pathognomonic • Often self-limiting (muco) cutaneous disorder • Systemic steroids for severe mucosal involvement • Infections <ul style="list-style-type: none"> – HSV most common cause – Often recurrent; May benefit from suppression – Mycoplasma pneumoniae – Treat active infection if would otherwise treat • Drugs (< 10%) <ul style="list-style-type: none"> – Sulfonamides, antiseizure medications, penicillins, NSAIDs, allopurinol | <ul style="list-style-type: none"> • 2 types <ol style="list-style-type: none"> 1) EM minor <ul style="list-style-type: none"> • No systemic symptoms • No mucosal involvement 2) EM major <ul style="list-style-type: none"> • Systemic symptoms present • Mucosal involvement severe • Acute, target lesions pathognomonic • Often self-limiting (muco) cutaneous disorder • Systemic steroids for severe mucosal involvement • Infections <ul style="list-style-type: none"> – HSV most common cause – Often recurrent; May benefit from suppression – Mycoplasma pneumoniae – Only treat active infection • Drugs (< 10%) <ul style="list-style-type: none"> – Sulfonamides, antiseizure medications, penicillins, NSAIDs, allopurinol |

Endocrinology:

Page 10, Cushing's — Diagnostic Workup

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|---|--|
| <ul style="list-style-type: none"> • Screen → Confirm → Localize • Screen <ol style="list-style-type: none"> 1) 24-hour urine free cortisol; Pitfall: Depression, alcoholism, false+ 2) 1-mg overnight dexamethasone suppression test; Pitfall: Estrogen increased CBG false+ 3) Late-night salivary cortisol; Pitfall: Shift workers?? • Confirm abnormal test | <ul style="list-style-type: none"> • Screen → Confirm → Localize • Screen <ol style="list-style-type: none"> 1) 24-hour urine free cortisol; Pitfall: Depression, alcoholism, false+ 2) 1-mg overnight dexamethasone suppression test; Pitfall: Estrogen increases CBG, false+ 3) Late-night salivary cortisol; Pitfall: Shift workers?? • Confirm abnormal test |

Endocrinology:

Page 18, Fibrates

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|---|---|
| <ul style="list-style-type: none"> • Decrease TG and raise HDL (small effect on LDL) • Gemfibrozil is the only fibrate with demonstrated CV benefit (Helsinki heart, VA-HIT) <ul style="list-style-type: none"> – Was vs. placebo • Fenofibrate, while more effective for reducing TG and less statin interaction, did not show benefit in RCTs (ACCORD) for 2° prevention • Myopathy risk alone and especially when gemfibrozil + statins | <ul style="list-style-type: none"> • Decrease TG and raise HDL (small effect on LDL) • Gemfibrozil is the only fibrate with demonstrated CV benefit (Helsinki heart, VA-HIT) <ul style="list-style-type: none"> – Gemfibrozil vs. placebo • Fenofibrate, while more effective for reducing TG and less statin interaction, did not show benefit in RCTs (ACCORD) for 2° prevention • Myopathy risk alone and especially when gemfibrozil + statins |

Endocrinology:

Page 19, Diagnosis of Type 2 DM

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|---|---|
| <ul style="list-style-type: none"> • Random glucose ≥ 200 mg/dL with symptoms of DM (polyuria, polydipsia, weight loss) • Fasting plasma glucose ≥ 126 mg/dL $\times 2$ • Glucose ≥ 200 mg/dL on 2-hour OGTT • HbA1c $\geq 6.5\% \times 2$ | <ul style="list-style-type: none"> • Random glucose ≥ 200 mg/dL with symptoms of DM (polyuria, polydipsia, weight loss, polyphagia) • Fasting plasma glucose ≥ 126 mg/dL $\times 2$ • Glucose ≥ 200 mg/dL on 2-hour OGTT • HbA1c $\geq 6.5\% \times 2$ |

Gastroenterology:**Page 17, Diarrhea**

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|---|---|
| <ul style="list-style-type: none"> • > 200–250 g/day of stool, where normal is 150–180 g • Normal stool frequency is 3/day to 3/week • General divisions <ul style="list-style-type: none"> – Acute: ≤ 2 weeks – Persistent: 2–4 weeks – Chronic: > 4 weeks | <ul style="list-style-type: none"> • > 200–250 g/day of stool, where normal is 150–180 g/day • Normal stool frequency is 3/day to 3/week • General divisions <ul style="list-style-type: none"> – Acute: ≤ 2 weeks – Persistent: 2–4 weeks – Chronic: > 4 weeks |

General Internal Medicine:**Page 5, Medications in Osteoporosis**

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|--|
| <ul style="list-style-type: none"> • Glucocorticoids • Antiseizure medications (phenobarbital, phenytoin, carbamazepine) • Drugs associated with hypogonadism (depo medroxyprogesterone, GnRHs, aromatase inhibitors, methotrexate, chronic opioids) • Thyroid over-replacement • Cyclosporine • Lithium | <ul style="list-style-type: none"> • Glucocorticoids • Antiseizure medications (phenobarbital, phenytoin, carbamazepine) • Drugs associated with hypogonadism (depot medroxyprogesterone, GnRHs, aromatase inhibitors, methotrexate, chronic opioids) • Thyroid overreplacement • Cyclosporine • Lithium • PPI |

General Internal Medicine:**Page 9, Testicular Abnormalities**

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|---|
| <ul style="list-style-type: none"> • Painful mass: emergency! <ul style="list-style-type: none"> – Torsion (testicular or testicular appendage) – Epididymitis/Epididymoorchitis – Hematocele • Nonpainful: <ul style="list-style-type: none"> – Hydrocele – Varicocele – Hernia – Testicular cancer – Skin cysts | <ul style="list-style-type: none"> • Painful mass: emergency! <ul style="list-style-type: none"> – Torsion (testicular or testicular appendage) – Epididymitis/Epididymoorchitis – Hematocele • Nonpainful mass: <ul style="list-style-type: none"> – Hydrocele – Varicocele – Hernia – Testicular cancer – Skin cysts |

General Internal Medicine:

Page 13, Perioperative Medicine — Management > Heparin Bridging

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|---|---|
| <ul style="list-style-type: none"> Diabetes agents <ul style="list-style-type: none"> Oral hypoglycemics — stop 24–72 hours before surgery depending upon half-life of drug and risk of hypoglycemia No short acting the morning of surgery Basal insulin — continue same dose or reduce to 2/3 | <ul style="list-style-type: none"> Diabetes agents <ul style="list-style-type: none"> Oral hypoglycemics — stop 24–72 hours before surgery depending upon half-life of drug and risk of hypoglycemia No short-acting insulin the morning of surgery Basal insulin — continue same dose or reduce to 2/3 |

General Internal Medicine:

Page 14, Adult Immunization Schedule

Table currently reads:

| Age | Schedule |
|------------------------------|---|
| Young adults | Completion of childhood immunizations (MMR, Tdap or Td, polio, Hep A and B) |
| 11–26 and 26–45 (males too!) | HPV vaccine |
| Every year | Influenza |
| Every 10 years | Tdap once, then Td booster |
| > 60 | Recombinant Zoster vaccine (2-dose series spaced 2–6 months apart) |

Table should read:

| Age | Schedule |
|------------------------------|---|
| Young adults | Completion of childhood immunizations (MMR, Tdap or Td, polio, Hep A and B) |
| 11–26 and 26–45 (males too!) | HPV vaccine |
| Every year | Influenza |
| Every 10 years | Tdap once, then Td booster |
| > 50 | Recombinant Zoster vaccine (2-dose series spaced 2–6 months apart) |

General Internal Medicine:
Page 17, Poisoning and Overdose Antidote

Table currently reads:

| Toxin | Antidote |
|-------------------|--------------------------------------|
| Acetaminophen | <i>N</i> -acetylcysteine |
| Narcotics | Naloxone |
| Benzodiazepines | Flumazenil* |
| Nitrates | Methylene blue |
| Iron | Deferoxamine |
| Methanol, glycols | Fomepizole |
| Organophosphates | Atropine/Pralidoxime (2-PAM) |
| Cyanide | Nitrates , sodium thiosulfate |

*Flumazenil not recommended for someone who is a chronic user of benzodiazepines, as it can induce seizure

Table should read:

| Toxin | Antidote |
|-------------------|--------------------------------------|
| Acetaminophen | <i>N</i> -acetylcysteine |
| Narcotics | Naloxone |
| Benzodiazepines | Flumazenil* |
| Nitrites | Methylene blue |
| Iron | Deferoxamine |
| Methanol, glycols | Fomepizole |
| Organophosphates | Atropine/Pralidoxime (2-PAM) |
| Cyanide | Nitrites , sodium thiosulfate |

*Flumazenil not recommended for someone who is a chronic user of benzodiazepines, as it can induce seizure

General Internal Medicine:
Page 19, Acute Sinusitis — Therapy

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|---|
| <ul style="list-style-type: none"> Decongestants/Saline irrigation 1st line — amoxicillin/clavulanate (2 g bid in areas with $\geq 10\%$ PRSP, ≥ 65 years of age, hospitalization in last 5 days, severe, antibiotic use in previous month, multiple comorbidities, immunocompromised) Alternative: doxycycline, levofloxacin, moxifloxacin 5- to 7-day duration of therapy TMP/SMX, macrolides, no longer recommended | <ul style="list-style-type: none"> Decongestants/Saline irrigation 1st line — amoxicillin/clavulanate (2 g bid in areas with $\geq 10\%$ PRSP, ≥ 65 years of age, hospitalization in last 5 days, severe, antibiotic use in previous month, multiple comorbidities, immunocompromised) Alternative: doxycycline, levofloxacin, moxifloxacin 5- to 7-day duration of therapy TMP/SMX or macrolides no longer recommended |

General Internal Medicine:

Page 19, Drugs to Absolutely Avoid During Pregnancy

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|--|
| <ul style="list-style-type: none"> • Isotretinoin • ACE inhibitors, ARBs, and spironolactone • Benzodiazepines • Quinolones and tetracyclines • Tetracyclines • Nitroprusside • Warfarin | <ul style="list-style-type: none"> • Isotretinoin • ACE inhibitors, ARBs, and spironolactone • Benzodiazepines • Quinolones and tetracyclines • Tetracyclines • Nitroprusside • Warfarin |

General Internal Medicine:

Page 20, Preconception Care

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|--|
| <ul style="list-style-type: none"> • All women of childbearing age — 50% of pregnancies are unplanned! • Folate (400 mg normally, 4 g high risk) • Immunizations (TDaP, flu, VZV, MMR) • Environmental toxins, domestic violence • Review all meds and preexisting conditions | <ul style="list-style-type: none"> • All women of childbearing age — 50% of pregnancies are unplanned! • Folate (400 mg normally, 4 g high risk) • Immunizations (Tdap, flu, varicella, MMR) • Environmental toxins, domestic violence • Review all meds and preexisting conditions |

General Internal Medicine:

Page 21, SLE and Pregnancy

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|---|--|
| <ul style="list-style-type: none"> • Normal fertility, but miscarriage rate 1.5–3× increased • Anti-Ro(SSA) or anti-La (SSB) antibodies in the mother are associated with neonatal lupus and congenital heart block • If SLE active (especially with renal involvement) or • if APLA+ or anti-dsDNA+, increased risk of SLE flares and fetal problems • Treat with steroids or hydroxychloroquine • Avoid methotrexate | <ul style="list-style-type: none"> • Normal fertility, but miscarriage rate 1.5–3× increased • Anti-Ro(SSA) or anti-La (SSB) antibodies in the mother are associated with neonatal lupus and congenital heart block • If SLE active (especially with renal involvement) or if APLA+ or anti-dsDNA+, increased risk of SLE flares and fetal problems • Treat with steroids or hydroxychloroquine • Avoid methotrexate |

Infectious Disease:

Page 10, Babesiosis

| Text currently reads: | Text should read: |
|---|--|
| <ul style="list-style-type: none"> • <u>Clinical manifestations</u> <ul style="list-style-type: none"> – 1- to 4-week incubation period – Asymptomatic (~40%) – Mild disease (< 4% parasitemia): fever, malaise, hemolysis, thrombocytopenia, transaminase elevations, jaundice – Severe disease (≥ 4% parasitemia): asplenic, immunocompromised ARDS, DIC, AKI, altered mental status | <ul style="list-style-type: none"> • <u>Clinical manifestations</u> <ul style="list-style-type: none"> – 1- to 4-week incubation period – Asymptomatic (~40%) – Mild disease (< 4% parasitemia): fever, malaise, hemolysis, thrombocytopenia, transaminase elevations, jaundice – Severe disease (≥ 4% parasitemia): asplenic, immunocompromised, ARDS, DIC, AKI, altered mental status |

Infectious Disease:

Page 13, Coccidioidomycosis

Figure currently reads:

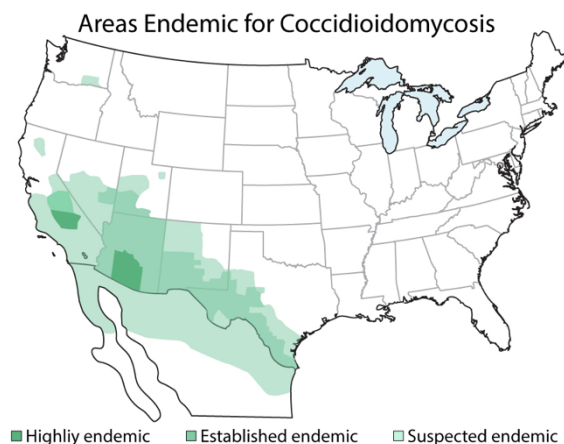
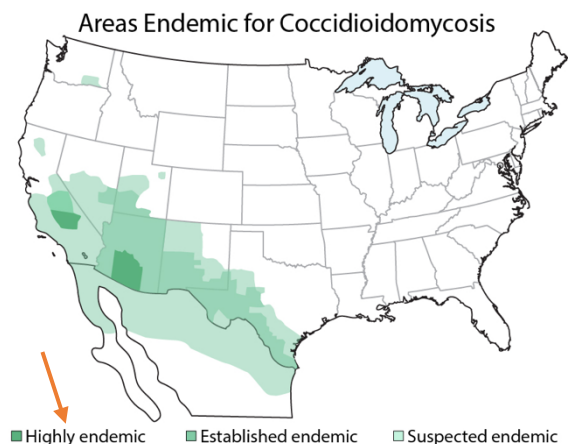


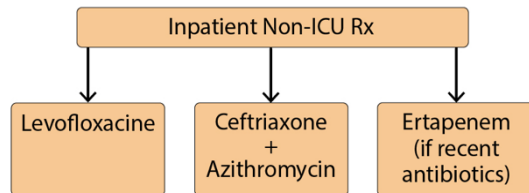
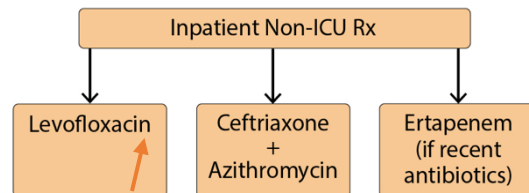
Figure should read (corrected spelling error):



Infectious Disease:

Page 39, Zika Virus 2020

| Text currently reads: | Text should read: |
|---|---|
| <ul style="list-style-type: none"> • <u>Transmission</u> <ul style="list-style-type: none"> – <i>Aedes</i> mosquito-borne Flavivirus <ul style="list-style-type: none"> • ~ Dengue, Ebola, yellow fever | <ul style="list-style-type: none"> • <u>Transmission</u> <ul style="list-style-type: none"> – <i>Aedes</i> mosquito-borne Flavivirus family <ul style="list-style-type: none"> • ~ Dengue, Ebola, yellow fever |

Infectious Disease:**Page 49, This Patient's Severity Scores***Figure currently reads:**Figure should read (corrected spelling error):***Nephrology:****Page 8, Cryoglobulinemic GN**

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|---|
| <u>Pearl</u> Purpuric rash Raynaud Phenomenon C4 is depressed, whereas C3 levels are low normal. Renal disease may improve with Rx of hepatitis C. | <u>Pearl</u> Purpuric rash Pseudo-Raynaud Phenomenon C4 is depressed, whereas C3 levels are low normal. Renal disease may improve with Rx of hepatitis C. |

Nephrology:**Page 8, Nephritis with Normal Complements — ANCA Vasculitis and Anti-GBM**

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|--|
| <ul style="list-style-type: none"> Granulomatosis with polyangiitis (formerly Wegener's) <ul style="list-style-type: none"> – URTI (sinusitis, epistaxis) – LRTI (infiltrates, cavitary lesions, DAH) – C-ANCA → anti-PR3 | <ul style="list-style-type: none"> Granulomatosis with polyangiitis (formerly Wegener's) <ul style="list-style-type: none"> – URTI (sinusitis, epistaxis) – LRTI (infiltrates, cavitary lesions, DAH, consolidation) – C-ANCA → anti-PR3 |

Nephrology:**Page 9, Focal Segmental Glomerulosclerosis — Clinical Clues and Features**

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|--|
| <ul style="list-style-type: none"> • Most common primary renal disease in African Americans • Patient usually hypertensive; Usually progresses to ESRD over 5–20 years • Primary (idiopathic) • Secondary etiologies <ul style="list-style-type: none"> – Familial — Gene mutations (APOI1) – Drugs — Intravenous heroin, pamidronate – Infections — HIV (collapsing FSGS)** , parvovirus – Adaptive — Reflux nephropathy, obesity | <ul style="list-style-type: none"> • Most common primary renal disease in African Americans • Patient usually hypertensive; Usually progresses to ESRD over 5–20 years • Primary (idiopathic) • Secondary etiologies <ul style="list-style-type: none"> – Familial — Gene mutations (APOL1) – Drugs — Intravenous heroin, pamidronate – Infections — HIV (collapsing FSGS)** , parvovirus – Adaptive — Reflux nephropathy, obesity |

Nephrology:**Page 12, Calcium and the Risk of Symptomatic Kidney Stones in Males***Table currently reads:*

| | Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|-----------------------------|---------|------------------|------------------|------------------|------------------|
| Calcium intake (mg) | < 605 | 605–722 | 723–848 | 849–1,049 | > 1,050 |
| Incidence/100,000 Person/yr | 435 | 310 | 279 | 266 | 243 |
| Multivariate RR (95% CI) | 1.0 | 0.74 (0.57–0.97) | 0.68 (0.52–0.90) | 0.68 (0.51–0.90) | 0.66 (0.49–0.90) |

Table should read (removed negative symbol; CI = confidence interval, not chloride):

| | Group 1 | Group 2 | Group 3 | Group 4 | Group 5 |
|-----------------------------|---------|------------------|------------------|------------------|------------------|
| Calcium intake (mg) | < 605 | 605–722 | 723–848 | 849–1,049 | > 1,050 |
| Incidence/100,000 Person/yr | 435 | 310 | 279 | 266 | 243 |
| Multivariate RR (95% CI) ← | 1.0 | 0.74 (0.57–0.97) | 0.68 (0.52–0.90) | 0.68 (0.51–0.90) | 0.66 (0.49–0.90) |

Nephrology:

Page 19, Approach to Hyponatremia

| Text currently reads: | Text should read: |
|--|--|
| <ul style="list-style-type: none"> Measure plasma osmolality → Need to know P_{Osm} <ul style="list-style-type: none"> When low, defines true hypo-osmolal state or clinical hyponatremia If high → Plasma glucose; If normal → Protein and lipids | <ul style="list-style-type: none"> Measure plasma osmolality → Need to know P_{Osm} <ul style="list-style-type: none"> When low, defines true hyposmolar state or clinical hyponatremia If high → Plasma glucose; If normal → Protein and lipids |

Nephrology:

Page 22, Hyperkalemia > Hyperkalemia — Inhibitors of the Renin-Angiotensin-Aldosterone System

Image currently shows:

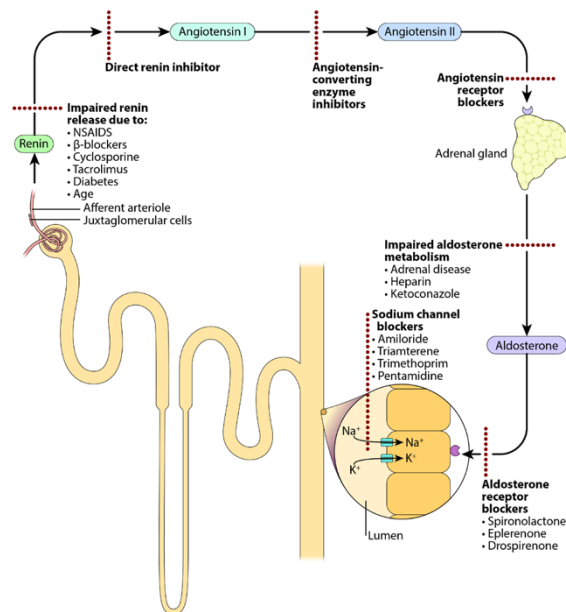
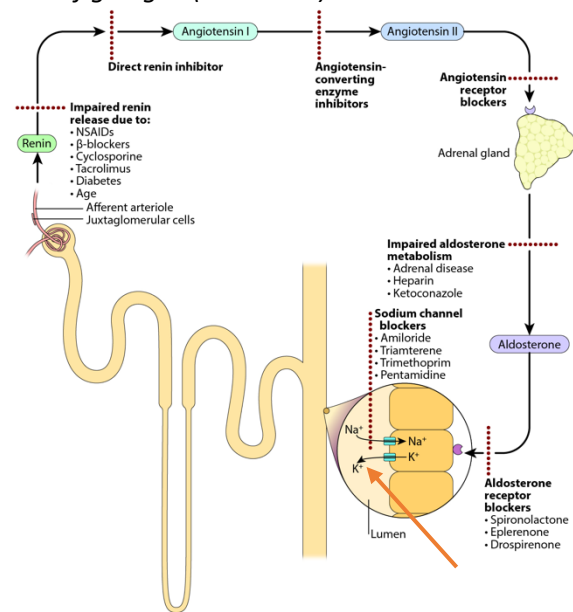


Image should show potassium going out instead of going in (see arrow):



Neurology:

Page 9, Stroke > Ischemic Strokes > Ischemic Stroke — ASA 2018 Guidelines

| Text currently reads: | Text should read: |
|---|--|
| <ul style="list-style-type: none"> <u>Systemic thrombolytics</u> <ul style="list-style-type: none"> NIHSS > 4 Acute ischemic stroke < 4.5 hours 3–4.5 hours (exclude if > 80 years of age, DM, and prior ischemic stroke, anticoagulation, NIHSS > 25) BP cannot be > 185/110 mmHg No tPA exclusion criteria | <ul style="list-style-type: none"> <u>Systemic thrombolytics</u> <ul style="list-style-type: none"> NIHSS > 4 Acute ischemic stroke < 4.5 hours 3–4.5 hours (exclude if > 80 years of age, DM, and prior ischemic stroke, anticoagulation, NIHSS > 25) BP cannot be > 185/110 mmHg No absolute tPA exclusion criteria |

Pulmonary Medicine:**Page 8, AR 6**

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|---|--|
| <p>A 47-year-old man is evaluated for worsening of asthma symptoms characterized by frequent daytime wheezing and cough, as well as nocturnal awakening related to asthma 2–3 times per week.</p> <p>He has been using his inhalers regularly without adequate relief. He has not had recent URI infection, sinusitis, postnasal drip, or new exposures. He is taking an inhaled corticosteroid and inhaled albuterol.</p> <p>On exam, temp 98.6°F, BP 135/80, HR 80, and RR 18. Lung exam reveals scattered bilateral wheezing. Spirometry shows an FEV1 of 70% of predicted. Following an inhaled bronchodilator, FEV1 improves to 90% of predicted.</p> | <p>A 47-year-old man is evaluated for worsening of asthma symptoms characterized by frequent daytime wheezing and cough, as well as nocturnal awakening related to asthma 2–3 times per week.</p> <p>He has been using his inhalers regularly without adequate relief. He has not had recent URI infection, sinusitis, postnasal drip, or new exposures. He is taking an inhaled corticosteroid and inhaled albuterol.</p> <p>On exam, temp 98.6°F (37°C), BP 135/80, HR 80, and RR 18. Lung exam reveals scattered bilateral wheezing. Spirometry shows an FEV1 of 70% of predicted. Following an inhaled bronchodilator, FEV1 improves to 90% of predicted.</p> |

Pulmonary Medicine:**Page 27, Exudative vs. Transudative**

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|---|--|
| <ul style="list-style-type: none"> pH <ul style="list-style-type: none"> pH > 7.0 suggests complicated effusion and possible need for chest tube or seen in RA | <ul style="list-style-type: none"> pH <ul style="list-style-type: none"> pH < 7.20 suggests complicated effusion and possible need for chest tube or seen in RA |

Rheumatology:**Page 4, Joint Swelling vs. Bony Enlargement**

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|---|
| <ul style="list-style-type: none"> MCPs + PIPs Spongy/Boggy/ Painful DIPs spared Wrist swelling <p>= Inflammatory arthritis (like RA)</p> | <ul style="list-style-type: none"> MCPs + PIPs Spongy/Boggy/Painful DIPs spared Wrist swelling <p>= Inflammatory arthritis (like RA)</p> |

Rheumatology:

Page 13, Gout

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|--|
| <ul style="list-style-type: none">• Risks<ul style="list-style-type: none">– Trauma, surgery, starvation, dehydration– Chronic kidney disease– Diet: purine-rich meat, seafood, high-fructose corn syrup/processed sugars, ethanol, male sex– Medications: diuretics, low-dose aspirin, cyclosporine | <ul style="list-style-type: none">• Risks<ul style="list-style-type: none">– Trauma, surgery, starvation, dehydration– Chronic kidney disease– Diet: purine-rich meat, seafood, high-fructose corn syrup/processed sugars, ethanol,– Male sex– Medications: diuretics, low-dose aspirin, cyclosporine |

Rheumatology:

Page 17, AR 7

| <i>Text currently reads:</i> | <i>Text should read:</i> |
|--|---|
| 22-year-old African American female with a 1-year h/o arthralgias , alopecia, fatigue with sun exposure, +ANA, +RNP. WBC 3.1. U/A noted RBC casts and 3+ proteinuria. | 22-year-old African American female with a 1-year h/o inflammatory arthritis , alopecia, fatigue with sun exposure, +ANA, +RNP. WBC 3.1. U/A noted RBC casts and 3+ proteinuria. |