

PRIMARY CARE CASE STUDIES

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HEENT CASES

1. Marge Thaller has brought her 15 year old daughter to your office stating that the school nurse sent her home "because she has pink-eye." What is the medical term for condition? Name three possible etiologic causes for this condition. How would you treat each of the causes? How would you differentiate among the different causes e.g. history, presentation, etc. in order to make a decision? If you choose drug therapy be specific re: agent and dosing. Suggest alternative drugs you might have used (assume no drug allergies).

Mrs. Thaller is caring for her sister's 4 month old child while her sister is out of town attending to their father's illness. She says "I think the baby has caught it too; can you give me something for him, as well." Can the baby "catch" this condition? What can you give or not give the baby and should you do so?

2. John Ryan, 34, has ear pain and has come to you with "a terrible earache." He has used some "drops left over from last time I had this." The drops are from an outdated 5 ml bottle of Cortisporin Otic Solution. You examine his ears and decide that these drops are not appropriate because he has otitis media. What did you find on physical exam which led to this conclusion? For what condition would you prescribe the drops he has brought to your office? Describe the physical findings and common historical findings for this condition? Could there be a problem with using ear drops in otitis media? What and why? Prescribe treatment for otitis media and support your choice. What other drug(s) might you have used?

3. Marsha Ornstein, 17, an otherwise overall healthy teenager has come to you with "very sore throat." She has been feeling quite fatigued. You examine her throat and it is very reddened with prominent exudates. What differential diagnoses should you consider and how would you distinguish (rule in or rule out) each of them? Choose one of the possible diagnoses and describe the signs and symptoms (history and P/E) plus design a treatment plan. Support your answer.

4. Mark Smith, 43, has come to your office for treatment of what he suspects is sinusitis. You concur. What are some of the signs and symptoms which may have lead you to this conclusion? He has a prescription plan wherein he has a \$10.00 copay for brand drugs and a \$5.00 copay for generic drugs. Assuming no allergies, what drug(s) will you prescribe for him; what other options might you have considered? Would your choice(s) be different if he had no prescription plan and his finances were quite limited?

RESPIRATORY CASES

1. Mary Saturn, a 27 MBA prepared account manager, has come to you because her mom insists that she “get this throat and cough treated.” Mom advised Mary that she will need “antibiotics before it gets any worse.” Mary has been ill approximately 3-4 days. She has a mild sore throat, a low-grade fever, a cough and nasal congestion. You believe she has a viral infection (URI/viral syndrome) versus a bacterial infection. What findings may have led you to this conclusion? What types of secondary bacterial infections did you need to rule out and how did you rule them out? What can you prescribe for Mary?
2. Rupert Kingston, 19 year old college student has just be diagnosed with pneumonia. What are the signs (physical findings) and symptoms (historical data) which may have lead to this diagnosis? What are the different types of pneumonia which Rupert might possibly have and what would be the appropriate therapy for each of them? What additional information (history and physical findings) might you need in order to make the particular diagnosis and choose therapy? Interestingly, Rupert’s 62 year old granddad, Al Kingston, has just visited his physician; he has also been diagnosed with pneumonia. Al smokes and drinks to excess. How might his treatment considerations differ and why?
3. Wilbert Forsythe, 24 year old basketball player, has asthma. He uses Proventil (albuterol) inhaler every day just before practice and “it works great!” If he does not use the albuterol, he cannot complete the game. He also uses it “sometimes at night, if I can’t breath” and additionally “once or twice a week, first thing in the morning.” He doesn’t want to change his medication regimen because “it’s working fine and my performance this season is better than it has ever been.” He asks that you “just renew the script. I doing fine!” What is wrong with this approach or does this patient, in fact, have a legitimate point? What are the various alternative regimens might you consider and why? Choose one and support your decision.
4. Michael Blanding, 34, wants to quit smoking. He has tried and failed several times. He manages a very busy restaurant which is currently involved in a litigation suit where the restaurant may well have some liability. Michael was on duty the night when the incident occurred. He smokes “because I’m so stressed out and I need to do something.” What are the alternatives you might consider for this patient? What additional information might you need before you can decide on a treatment plan? Choose one of these options and state why you selected this approach i.e. support your position.

CARDIOVASCULAR - DYSLIPIDEMIA CASE STUDIES

1. Olsen Plummer, 62, a local farmer, presents for a first visit to your office. His BP is 150/90. He has left ventricular hypertrophy (LVH) on EKG and a II/VI systolic murmur on cardiac auscultation. He thinks he “has always had a murmur.” He has never had an MI but he is now experiencing angina. He describes his symptoms to you. What sort of description might he have offered which has suggested this diagnosis to you? Needless to say, you are concerned that he is at risk for an MI. What is the most potent predictor of CHD? What are some other risk factors which you might obtain from further history? What additional diagnostics might you order and what information would you obtain from them? What is your management plan for this patient? What medications is he likely to need?
2. Margaret Singer, 32, has been experiencing panic attacks. Although panic attacks are very common, you wish to pursue whether there could be an association with a common cardiac disorder. Which cardiac condition is possibly (it is speculative) associated with panic attacks? How might this condition present on physical exam and how would you confirm it. Assuming the diagnostic(s) confirms your suspicions, how might you manage this condition?

3. Ronald Hoffman, 58, tells you he has aortic stenosis. What exactly is this condition? What is the difference between stenosis and regurgitation? How would each present on physical exam? You review his chart and notice that he was referred to cardiology for further consultation. The consultation report confirms that he does, indeed, have aortic stenosis and that he is now, in the opinion of the cardiologist, a surgical candidate. How might the cardiologist have established this diagnosis? What is the implication of the statement concerning Mr Hoffman being a surgical candidate? Mr. Hoffman advises you that he does not want to have surgery and asks for your opinion? What are the implications of his decision? How might you advise him?

4. Edgar Worthington, 58, is s/p CABG surgery. You feel he could benefit from a lipid lowering agent but he is quite firmly opposed because "they are not good for your liver." He also states "Anyway, my cholesterol is not all that bad." In fact, it is not markedly elevated at 235. His LDL is 175; his HDL is low. Edgar has been less than successful at lifestyle modification attempts. You feel strongly that he would benefit from medication. Why? What are your various drug options? Choose a specific medication and support your answer.

5. Edgar's younger brother, Jeff Worthington, 47, has hypertension and diabetes. He has no evidence coronary heart disease (CHD). At what level LDL would you consider initiating drug therapy, assuming that dietary and lifestyle modifications have failed? The Worthington brothers have a sister, Anne Stevens, 48. She has a total cholesterol of 180 and an HDL of 71 with essentially the same diet (non-ideal) and lifestyle (sedentary) as her brothers. What might explain the difference? Be specific.

6. Ellen Berle, 78, has right-sided heart failure and presents to you for a routine follow-up visit. She has had failure for many years. What is the greatest predisposing cause for right-sided heart failure? What are some other possible causes? How would Mrs. Berle present clinically (history and physical findings)? How would she present if she had left-sided heart failure? Mrs. Berle's blood pressure is 168/70. Design a medication regimen for her and support your choice(s). What common class of medications might you want to avoid for this patient and why? How might you confirm her diagnosis? You suspect that Mrs Berle may have mitral stenosis. What factor(s) in her history may have predisposed her? What finding on physical exam could have raised your index of suspicion? How might you confirm it?

7. Richard Anderson, 50, was vacationing in the Rocky Mountains of Colorado. He normally hikes without difficulty and is an avid bicycle rider. Mr. Anderson was camping in the Rockies and experienced severe chest pain and SOB several hours after retiring to bed. Shortly thereafter he had decreased activity tolerance although no further episodes of chest pain. Mr. Anderson takes Prilosec (omeprazole). At this insistence of his wife, Mr Anderson consulted a physician in Colorado. The physician did an EKG and drew blood work. He ruled out an MI based on the findings. What blood work did he likely draw? What parameters of the EKG would lead to his conclusion? If not an MI, what might have accounted for his activity intolerance?. The physician referred Mr Anderson to his primary care provider for further evaluation and management. What is the likely work-up which will ensue when he visits his provider?

HYPERTENSION - PERIPHERAL VASCULAR CASE STUDIES

1. Rachael Gray, 52, has hypertension and is quite upset because "I do everything right and I still got hypertension." How does one make a diagnosis of hypertension? Indeed, she does exercise regularly; she is not overweight; she does not smoke and she drinks only occasionally (and then moderately). What can you tell Rachael as to why she has hypertension? What might you prescribe for Rachael and why? What other agent(s) might have you considered for her?
2. Rachael's 24 year old son, Dan, has also been diagnosed with hypertension. Like mom, he does not smoke. He plays sports regularly. He is not overweight and he is generally in good health. How might you manage this case? What options might you consider for him? What would you do differently for him versus his mom? Would it matter if he were black? Support all answers.
3. Nick Barasso is a 62 year old hypertensive with Type II diabetes. He takes Glucotrol XL (glipizide) 20 mg q d, Monopril (fosinopril) 40 mg q d, Procardia XL (nifedipine) qd and hydrochlorothiazide 12.5 mg q d. He tells you "I can't afford this much medication. I get \$625 per month for social security and \$319 goes for the medication." His pressure is only fairly well controlled at best. What can you do for him?
4. Winston Calgary, 62, a new patient to the practice, is found to have hypertension with blood pressure readings in the range of 155 to 160, systolic and 95-98 diastolic. A chart review of his previous medical records indicates that his blood pressure has been elevated in this range over the last year or so,. He advises you that he has "a heart condition." He tires easily and occasionally needs some minor assistance with ADL but is largely independent. He is often SOB and readily becomes dyspneic if he takes the trash to the curb. What type(s) of "heart condition" might he have? What additional findings might he have on P/E? Discuss how his comorbid medical condition might impact on your choice of antihypertensive agent(s). Be thorough and specific.
5. Orin Johnson, a 42 year old male, tells you "I don't like that medication you gave me. It's 'affecting' me." On further probing, you learn he has become impotent since taking the drug. What class(s) of drugs might he be taking? You had hoped to avoid this scenario originally by giving him benazepril (Lotensin) (benazepril) but he developed a common but annoying side effect. What was this side effect? The Lotensin did work very well while he was taking it. What might you consider for him?
6. Elizabeth Martone, 68, has leathery skin to her ankles which is hyperpigmented. At 5.2", 195 lbs, she is considerably overweight and advises you that "my ankles have been swollen since menopause (age 52). She is G4 P4 with largely uneventful pregnancies, however, she has significant varicose veins which are likely secondary to a combination of multiparity and long standing obesity. Now Mrs Martone presents with a 2.5-3 cm ulceration located 5-6 cm proximal to the medial malleolus on the left leg. What is the likely diagnosis and etiology of this problem. Discuss the pathophysiology which explain her physical findings. What can you do to treat and manage this patient?
7. Robert Casing, 62, is a Type 2 diabetic, having been diagnosed 20 years ago. He is a known hyperlipidemic and markedly elevated triglycerides for which condition he takes gemfibrozil (Lopid). Mr Casing is moderately compliant with diet and medications, however he continues to smoke ½ to 1 pack of cigarettes per day, having done so since he served in the Navy during his early 20s. Not surprisingly he has been diagnosed with COPD a number of years ago and experiences SOB on relatively mild exertion. His activity is quite limited. He is accustomed to SOB of breath when walking to the end of his driveway to the mailbox but now over the last few months he has noticed pains to his legs when he is ¾ of the way down the driveway. The pains are very predictable and seem to occur at almost the same place each day. They occur at other times as well when he is walking and it is necessary to stop and rest frequently. What is the likely diagnosis for this problem? How does it explain his symptoms? What is the pathophysiology involved? Are there comorbid conditions which are contributing to the problem? What would you do to manage this patient?

HEMATOLOGY CASES: - IMMUNOLOGY CASES

1. Michael Greaney, 69, is a Franciscan monk living in the friary with numerous other monks. All of the clerics' meals are prepared by Polish nuns who live in the adjacent convent. Brother Greaney comments that the "food is really great; the sisters take a great deal of care." Brother Greaney has felt fatigue and "under the weather," of late. CBC reveals the following: HGB 10.7, HCT 32, MCV 72, RDW 10.1, MCHC 29. What do these initials mean? What does this clinical picture suggest (be specific)? What additional test(s) might you order? What might you find on physical exam? What is your management plan for this patient? Based on your tentative diagnosis, what might you predict would be the results of the additional tests you ordered?

2. Winston Ruppert, 58, has CBC results which are reported to you. Mr Ruppert is a patient of your practice partner's, Loren Smith, ANP, C. Mr Smith is presently vacationing in Yellowstone National Park and apparently drew the blood before he left. In his absence, the office staff now reports any abnormal values to you. You have not previously seen this patient and you are not familiar with his history. As usual, you are quite busy and your partner's absence has effectively doubled your workload. This report is yet "one more thing" in a day which has otherwise not gone well. The CBC is as follows: WBC 5.7 RBC 3.7, HGB 18.8 HCT 33; MCV 108, MCH 39, MCHC, 35, RDW 14.5. The differential reveals several larger hyper-segmented polys (neutrophils). What do these initials mean?. What does this clinical picture suggest (be specific)? What might you find on physical examination of this patient? What might you uncover on taking or reviewing the history patient? What additional tests might you order for this patient? Based on your tentative diagnosis what might you predict would be the results of the additional tests which you have ordered? Are there any conditions which have a similar hematologic presentation, albeit perhaps not exactly the same? How would you differentiate them?

P.S. Your partner has phoned to advise that while photographing the geothermal activity, he did ignore the signs and failed to stay on the walk ways while touring in the geyser basin. Accordingly, he fell into one of the bubble pots sustaining significant burns to his legs and arms. He will likely be out an additional 2-3 weeks and was issued a summons for the event.

3. You are reading the chart for Raymond Morgan, 38, and find that a previous provider has noted that he is "anergic." He has come to you for a pre-employment physical. What does this term mean? How might that provider have established this diagnosis? What are some possible reasons why Mr. Morgan might be anergic? Mr. Morgan wishes to work in a community center which employment requires a physical exam and TB testing for medical clearance. You must make a decision regarding this issue. How might you approach this issue of determining medical clearance for this patient?

Additionally, he is planning to travel to Africa this summer for a vacation. He has no family or friends in this country but rather he is traveling for purposes of "seeing all the animals." He will need required vaccinations and would like to receive them during this visit. How would you manage his care?

4. Judy Kamon, 42, is allergic to wasp stings. She has been stung twice last year and once the year before. Each time she has developed a very severe reaction wherein her hand and foot respectively swelled. There was considerable itching which lasted for 3 days or so. It seems that each time she is stung, the swelling and itching get more severe. She questions whether she should have a prescription for EpiPen (epinephrine) for purposes of self-injection in event that she is stung again. She is particularly concerned because a man in her neighborhood was stung by the same type of wasp and had an anaphylactic reaction. He very nearly died but the EMS worker injected epinephrine in time en-route to the emergency room. He was given additional epinephrine in the ER, IV steroids and was discharged with prescription for EpiPen with instructions to use immediately on any further hymenoptera stings. Do you agree with Mrs Kamon and should you write the prescription for EpiPen. Explain the pathophysiology of both of these patient's reactions. How would you medically manage each of them if they are stung?

ENDOCRINE CASE STUDIES

1. Arietta Fulbright, 35, has been complaining of fatigue; you suspect hypothyroidism. What findings on history and physical exam may have lead to this diagnosis? You order blood work and it confirms your suspicions. What blood work did you order and what are the results? What is the physiologic mechanism involved in these diagnostics? Arietta states "That's impossible. Seven years ago I was treated for an overactive thyroid and I took a medication to correct it; How could it now be under-active?"

Comment on this scenario. What signs/symptoms may have led to the diagnosis of hyperthyroidism 7 years ago? Design a treatment plan for Arietta. Be specific and include including follow-up.

2. Loreen Serry, 39, has a large swelling to her neck which is diagnosed as a goiter. What is the difference between a "toxic" and "non-toxic" goiter. What is the pathophysiology of each and what testing could you order to differentiate between them? What are some treatment options for these conditions? Loreen states that she recalls her older brother, Robert Johnson, 48, was once diagnosed with a "hot spot" to his thyroid. To what does this condition refer? How might you diagnose this condition? There was concern that Robert could have had cancer. Albeit rare, thyroid cancer would need to be ruled out in such cases. What percent of thyroid lesions are, in fact, malignant? What diagnostic can be done to rule out malignancy?

3. Warren Mitchell, a 52 year old overweight male, presents for a Commercial Driver's License (CDL) and is found to have 4+ glycosuria. He felt "a little tired but otherwise fine" and was "not aware of anything wrong." On questioning, he does acknowledge that "both of my grandparents and one uncle had diabetes." You order fasting blood work. What blood work do you order and why? What is the criteria for considering a diagnoses of diabetes? Your blood work confirms diabetes. Design a management plan. What type of diabetes does he have? Support your answer.

4. You have chosen to start Warren Mitchell on Glucophage (metformin). What other medications might you have considered? What are the advantages and disadvantages (including contraindications) of your choice and the other possible choices? Design a treatment plan for him including dosing, titration and monitoring. Describe how you would monitor his progress and include the frequency of monitoring.

5. Bridget Felsman is a 25 year old female has Type I diabetes. What medication(s) is she likely to use? What is the difference between Type I and Type II diabetes? Your answer should include a discussion etiologic mechanisms. Bridget's younger sister, Mary, age 18 has just been diagnosed with Type I diabetes. What are the signs and symptoms which may have led to this diagnosis? How might this case present differently from Warren Mitchell (case #1 above)? Design a management plan for Mary and support your answer.

6. Michael Reice, 15, presents for a routine school physical. You are tired and it has been a long day. This is the last patient for the day and you are anxious to go home and take a nap. When you sit down to take a history, you ask him what "what brings you in today." When he responds, you are surprised by the tenor of his voice. It seems to have a higher timbre than you were would have expected. The history is overall unremarkable. On performing the physical exam, when auscultating the heart and lungs, you notice that there is no evidence of axillary hair. Closer exam confirms the same. Subsequently, when examining the scrotum, for evidence of hernia or undescended testes, you notice that the patient is a Tanner stage one. On checking the chart, you discover that he will be 16 next month. Is there a problem here or is the clinician simply failing to account for normal variation? What are possible causes for this scenario? What is an appropriate management and follow-up?.

GASTROENTEROLOGY CASES

1. You suspect that Martha Winchel has irritable bowel syndrome (IBS). What symptoms and history might she have given which would lead to this suspicion? How might her presentation differ from a person who presented with inflammatory bowel disease (IBD)? What would you likely find on physical exam? What diagnostics might you consider to confirm your diagnosis? What treatment might you offer her? On discussion with you, Martha cannot accept this diagnosis as the reason for her symptoms. She insists that “there must be something more wrong with me” and demands additional testing-treatment. How might you handle this situation?
2. Morgan Paren, 33, has been vomiting with severe diarrhea since last evening. Yesterday, he participated in a picnic where possibly he ate food which was not properly handled. Mr Paren likely has food poisoning. He has severe abdominal cramping and feels quite miserable. How would you establish the diagnosis? What types (broad classes) of food poisoning might he have? How are they managed? How would you treat this patient if he presents to your office? How would you differentiate this presentation from viral gastroenteritis? Would the treatment be any different?
3. Martha Keene, 28, presents with right-sided abdominal pain. The pain has been intermittent over the last few days and is now quite persistent. Of course, you are concerned that she may have appendicitis (AP). It is Sunday am and you will need to call an emergency surgical consult if, indeed, she does have AP or an otherwise “hot abdomen.” What are some of the findings you would expect (subjective and objective) if she has appendicitis. What diagnostics can you order? What are some of the other possibilities which could explain these symptoms? How will you manage this case?

GYNECOLOGY CASE STUDIES

1. Rona Williams, 45, has a pap which has come back as ASCUS using the Bethesda system. What does this mean? What are some of the reasons why she may have these findings? Design a management plan for this patient. Be specific as to what you would do and when you would do it in terms of planning her care/treatment. Concerning Ms Williams and her routine gyn care, how often should she have mammography? Her sister, Maria Blackstone, 48, is also your patient and did consult you last week regarding a “lump” to her breast. You have palpated the lump, as well and noted its location in the right upper quadrant, ordering mammography. Surprisingly, the mammography report was negative. How should you handle this situation?
2. Willa Callas, 28, has been complaining of irregular bleeding and irritability over the last few months. On questioning her, you learn that she has been receiving Depo-Provera injections for contraception. Can you explain the bleeding and other symptoms? Be specific with respect to pathophysiology. How might you treat her?. Mary Fortune, Willa’s 18 year old sister, impressed at how you helped Willa, has come to you for contraceptive counseling. She is interested in oral contraceptives. What are the various choices you might consider? Choose a specific product and support your choice. What sort of counseling might you offer to Mary?

3 . Louise Anderson, 49, has consulted you today because now, over the last six months or so, she has been experiencing irregular menstrual bleeding which is “sometimes quite heavy and very unpredictable.” At other times, the irregular bleeding is described as light, of short duration and “more like spotting.” Overall, the occurrence of these symptoms is somewhat unpredictable. Moreover, there are periods of several months when she seems to have normal periods. During these times, she is not symptomatic as described above. She is most concerned about this problem which has resulted in her experiencing considerable anxiety. She has noticed that, over the last year or so, when she does have intervals of normal periods, cycles have occurred somewhat more frequently than the usual q 28-31 days. Actually, over the last year or two, her cycles have shortened to q 26 to 28 days. She is not having any hot flushes but once or twice last year she had prolonged, painless bleeding which was not typical of her usual menstrual flow. How can you explain these symptoms? How would you manage this case? - Include any diagnostics and/or treatment you might offer.

UROLOGY CASE STUDIES

1. Mitchel Wilson, 38, is married for 8 years with two children. He has come to you with urinary frequency, hesitancy and some urgency and moderate dysuria. There is no discharge and there has been no hematuria. The dipstick is negative for blood. It does, however, show positive leukocyte esterase test and there were numerous WBCs noted to the microscopic exam of the centrifuged specimen of urine. Additionally, there has been no fevers or systemic symptoms. On questioning, he states that his marriage has been “mostly” monogamous. When asked about whether there has been marital infidelity he responds “not really.” What are your suspected and rule-out diagnoses for this patient. What additional information would you need from the history and physical exam for this patient. Are there any additional diagnostics you would order. Choose a diagnosis which you feel is most likely from the facts presented and describe how you would confirm the diagnosis and manage this case.

2. Michael Brody, 68, has been diagnosed by his previous health provider as having benign prostatic hypertrophy (BPH). What exactly does this mean? How might he present on physical exam? How would his exam findings differ if he had prostatic CA? What sort of treatment options might you offer? How would you screen for prostatic CA?

Six months later, Mr Brody, develops urinary frequency, burning and hematuria. What is likely going on? How would you evaluate and treat this problem? Mr Brody’s daughter, Ellen Clarkson, 22, is newly married and seems to be having the same symptoms. Can you explain this phenomenon? He has advised you that normally she is treated by her gynecologist but she would prefer to see you instead since she cannot get an appointment with her gynecologist until next week. Can you accept Ms Clarkson as a patient? How will you diagnose and treat her?

ORTHOPEDIC - RHEUMATOLOGY CASE STUDIES

1. Cara Smith, 35, has been experiencing headaches, difficulty concentrating and migratory joint pains. She has been otherwise quite healthy. She questions whether she may have Lyme disease but can recall no specific tick bites. Her Lyme titre is negative. What additional history, physical exam findings or diagnostics might you want to obtain? What would be included in the differential diagnosis of these complaints? If she did have Lyme disease, how would you treat her? Would you treat her under these circumstances, given that the Lyme testing is negative?

2. Cara advises you that her dad, John Weber, 68, has gout. He has a prescriptions for allopurinol and Naprosyn. In fact, he is experiencing a flair-up of his gout at this time and he is using both of his prescriptions concurrently. He continues to experience pain. Mr. Weber comes to see you. What might you find on physical exam/diagnostics? How would you advise him with respect to his medications?

3. Clayton Fremington, an otherwise healthy 13 year old male, fell while roller-blading and would appear to have injured his ankle. Dad has brought him to you and asks whether it is just a sprain or could it “be something more serious like a fracture.” The Fremington’s have a very high deductible on their health insurance. For financial reasons, Dad would prefer to avoid an XRAY unless, of course, it is necessary. How will you make this determination? How will you treat Clayton?

Mr. Clayton thinks he may have carpal tunnel syndrome because “my hand keeps falling asleep when I drive.” How can you establish this diagnosis? What kind of treatment options can you offer him?

NEUROLOGY CASE STUDIES

1. Anita Anderson, 33, has a history of migraine headaches. What are the characteristics of her headaches which would suggest a diagnosis of migraines? What additional history might she give which would further support the diagnosis? She comes to the office with a particularly painful headache? What might you find on physical exam? What are some of the medication options she might use? Which class of drugs is specific for migraine headaches and give an example of how you might dose her e.g. write a prescription for one of products in this class? Which patients should not use this class of drugs and why?

Ms Anderson has been experiencing headaches associated with her menstrual periods. She takes Triphasil oral contraceptives. Might another type or brand of contraceptive be preferable for her? Why?

2. Winston Ashley, 72, has brought in his wife, Marietta, 71, because he is “concerned about her behavior.” He describes her the behaviors in question and you suspect that she might have early Alzheimer’s disease. What are some of the behaviors which may have lead you to this conclusion? What test(s) might you administer in the office which could further confirm your suspicions? What is the natural history of this disease?

When you suggest this diagnosis to Mr. Ashley he is states “that cannot be because she behaves perfectly when we are out in crowd.” In particular, he sites her interaction with other members of their congregation after Sunday services. He notes that no one has even suspected anything is amiss. Today, she is impeccably dressed and, indeed, very gracious during the interview. How can you explain this discrepancy? What treatment options can you offer Mrs. Ashley?

DERMATOLOGY CASE STUDIES

1. George Canis, 15, is brought in today by his mom. She reports that he has been experiencing “large red raised welts that move around.” The lesions occur spontaneously. George reports that the lesions are intensely pruritic and “I nearly go crazy scratching them.” These lesions seem to “come and go.” In fact, when Mrs. Canis made the appointment this a.m., the lesions were very prominent. Now, this afternoon, they seem to have vanished. George is taking no medications at this time. Nothing seems to make it better but perhaps it is worsened when he goes out in the cold; he is not sure of this finding. He has tried oatmeal baths but this measure was not helpful. What is going on here? Discuss this condition. What can you do for him?

2. Additionally, George has acne and Mom requests medication to treat it. He has both open and closed comedones to his face and back along with a moderate amount of inflammatory acneform lesions. What is the pathophysiology of acne? What are his treatment options? Choose one approach; write the prescription(s) and support your approach?

OBESITY CASE STUDIES

1. Alice Richards is 5'4" and weighs 214 lbs. She is overweight but is she obese? What is her BMI? She advises you that she is aware that she can not use the “phen-fen” medication but implores you to “please, do something for me; I just can’t stand myself anymore.” What is the phen-fen regimen and why can she not use this medication? What, if anything, can you do to help her? Ms Richard’s sister, Allicin Andracin, 49, is also considerably overweight. In fact, Allicin has taken Redux (fenfluramine) several years ago. She is quite concerned at this point that she may have sustained sequella as a result of having taken this medication. What test can you order which would clarify her concern?

2. Roberta Allison, 53, is 5'2" and weighs 160 lbs. She has gradually gained weight over the last 5 years or so. In her 20s and 30s she was actually quite thin weighing 112 lbs. What is Ms Allison’s ideal body weight? What is her current BMI. Her waist measurement is 39 inches and her waist to hip ratio is 0.95. What do these figures indicate? Ms Allison is overall quite sedentary. What daily caloric intake would be required for her loose 1 lbs per week? What caloric intake would be required for her to loose 2 lbs per week? What are some of the ways in which you might advise this patient if she consults you concerning weight loss? Be specific in designing a treatment plan for her.

PSYCHIATRY CASE STUDIES

1. Rachel Maron, 25, advises you that “there is something wrong with my heart.” She describes experiences where her “heart beats wildly” and then “it sometimes skips beats.” During these times her “throat feels tight” and “I can’t catch my breath.” Additionally, she gets “very nervous” frequently and would like to avoid going out of the home. She describes a sense of dread and panic during these episodes. She is gainfully employed, however, her increasing unwillingness to go out socially with her boyfriend is beginning to create problems in their relationship.

Episodes come about spontaneously and for no apparent reason. She advises you that “heart disease runs in my family.” Her dad and grand-dad both have (had) cardiac disease. Accordingly, she has come to you for an evaluation, concerned about her heart. What is your clinical approach to this patient? How would you diagnose and treat her?