

Clinical Case Histories

Case #1

Dorothy is a 57-year-old woman who weighs 220lbs and is 5 feet tall, and she is seeking relief of the soreness in her mouth. She complains that when she brushes her teeth, her gums bleed. When you examine her oral cavity, you note the presence of white patchy areas on the tongue.

A month ago Dorothy had three toes amputated in same-day surgery and she cannot feel her remaining toes. She has generalized moderate-to-severe chronic adult periodontitis. She currently has a respiratory infection for which she is taking 500 mg of cephalexin four times daily and Entex LA twice daily. Recently her blood glucose, as measured by glucose meter, has hovered between 240 and 300 in the evening, and she admits that her vision has been getting worse and that she cannot see as well as she used to. Her medication regimen is as follows:

Insulin, NPH, 35U in the morning, 10U in the evening
Insulin, regular, 10U in the morning before breakfast, 5U in the evening before dinner
Glyburide, 10 mg qd
Metformin, 850mg bid
Maxzide, 1 tablet qd
Femstat vaginal cream q hs for the past three nights

Dorothy's blood pressure at the beginning of the appointment was 165/92. You step out of the room, and when you return Dorothy is in a semiconscious state.

Questions to Consider

1. Identify the symptoms and complications Dorothy has that are related to her diabetes. How could these be minimized?
2. Why do you think that Dorothy has periodontal disease?
3. What would you guess her HgA1c level would be? Why?

Case #2

Florence is a 72-year-old woman taking the following medications:

Amiodarone, 200 mg qd
Bumex, 4 mg qd
Capoten, 50 mg q8h
Claritin, 10 mg qd
Coreg, 25 mg bid
Digoxin, 0.125 mg qd
Losartan, 50 mg qd
Nitro-Bid, 9 mg tid, q8h
Micro-K, 20 mEq bid
Zaroxolyn, 5 mg qd
Humalog, 20 U in the morning, 26 U at noon, and 36 U in the evening (should be given up to 15 minutes before a meal)

Her medical history is as follows:

Congestive heart failure
Cardiomyopathy
Diabetes (type II)
Pacemaker
Thrombocytopenia (in remission)
Leg cramps
Hysterectomy

She also has the following allergies:

Quinidine
Procainamide
Mexiletine
Tocainide
Keflex
Augmentin

Questions to Consider

1. Would the use of a pacemaker necessitate the use of an antibiotic? If so, which one?
2. Because the patient is taking Nitro-Bid, what drug would you use for an emergency?

Case #3

Gertrude is an 89-year-old female taking the following medications:

Fluvastatin, 40 mg qd
Lactulose 10 mg/15 ml, 15-30 ml/day
Coumadin, 5 mg qd
Diltiazem CD, 120 mg qd
Levothyroxine, 0.15 mg qd
Benazepril, 10 mg qd
Naproxen, 500 mg bid and prn
Glyburide, 2.5 mg qd
Esterified estrogens, 0.625 mg qd
Furosemide, 40 mg qd
K-Tab, 20 mEq qd

Her medical history is as follows:

Diabetes (type II)
Atrial fibrillation
Aortic valve replacement and coronary artery bypass grafting
Degenerative joint disease of the knee and hip
Incontinence
Hysterectomy
Cataracts
Obesity
Hypercholesteremia
Tinea pedis
Hemorrhoids
Cerebrovascular accident at age 53
Myocardial infarctions at ages 61 and 73

She also has the following allergy:

Penicillin (hives)

Questions to Consider

1. Can you draw a line between each medical condition and the medication that is being used for it? Are there any drugs or diseases left over?

2. Why do you think that Gertrude is taking Coumadin? What value should be monitored in a patient taking Coumadin? If you were going to perform oral prophylaxis, what would be an acceptable value?

TIPS FOR USING CASES 4 THROUGH 10

In patients who are taking complicated regimens of drugs, the presence of hypertension, cardiac disease, or both is common. Arthritis medications are also commonly used by these patients, and constipation is a common problem among older people in poor physical condition (e.g., no fiber in the diet, no exercise, taking drugs that produce constipation). Diabetes, hypercholesteremia, and leg cramps are also seen often.

This constellation of symptoms—diabetes, hypertension, arteriosclerotic cardiovascular disease, and hypercholesteremia—often occurs together in the same patient. These diseases often coexist because diabetes itself, especially if poorly controlled or of long duration, produces many systemic cardiovascular complications such as arteriosclerotic cardiovascular disease, hyperlipidemia, and myocardial infarction.

For the following cases, one exercise that can be performed is to determine precisely which drugs a patient is taking for each condition that he or she has. This activity can expose the presence of medications that are being taken for medical conditions the patient does not have and the existence of medical conditions that are going untreated. The reason that most of the patients described here are older women is because older men have a higher mortality rate.

Case #4

Leonard is a 57-year-old male.

Medication History:

Thioridazine, 50 mg tid
Trazodone, 150 mg hs
Lithium carbonate, 300 mg tid
Cogentin, 1 mg bid and prn
Paxil, 40 mg q am

Medical Problems:

Schizophrenia
Depression, bipolar
Gout

Case #5

Barbara is a 67-year-old woman.

Medication History:

Norvasc, 10 mg qd
Furosemide, 80 mg q am
Accolate, 20 mg bid
Amaryl, 4 mg bid
Lipitor, 20 mg qd
Glucophage, 500 mg bid
Imdur, 60 mg qd
Klor-Con/EF, 25 mEq bid
Bayer aspirin low dose, 81 mg qd
Atrovent (inhaler), inhale 2 puffs q 4 h while awake
Albuterol, use 0.3 ml in 3 ml NS in nebulizer q 4 h while awake
Humulin 70/30, 35 U SQ in the morning and the evening
Humulin R, 10 U for BG>300
Orphenadrine, 100 mg bid
Motrin, 800 mg, q 6h for pain
Doxidan, 1 tablet q hs and prn for constipation
Nitroglycerin, 0.4 mg SL q 5 min × 3 prn for chest pain
Fleet Enema, rectally prn for constipation

Medical Problems:

Hypertension
Diabetes
Angina
Asthma

Allergies:

Augmentin
Doxycycline

Case #6

Mary is a 65-year-old woman.

Medication History:

Cardizem CD, 240 mg qd
Medroxyprogesterone, 5 mg qd
Estratest HS, 1 tablet qd
Prilosec, 20 mg qd
Nexium 20 mg qd
Vitamin D, 50,000 U twice weekly
Amitriptyline, 10 mg tid
Zestril, 10 mg qd
Allegra D, 1 tablet qd or bid
Miacalcin, one spray in one nostril daily (alternating nostrils daily)
Atrovent, inhale 2 puffs tid or qid
AeroBid, inhale 2 puffs bid
Flonase nasal spray, 2 sprays in each nostril qd prn
Vitamin E, 400 U bid
Vitamin C, 500 mg qid
Centrum, 1 tablet qd
Prednisone, 10 mg, 2 pills qod and 1 pill qod, alternating

Medical Problems:

"Heatburn"
Hay fever
Asthma
"Heart problems"

Case #7

Juanita is a 63-year-old female on dialysis.

Medication History:

Nephro-Vite, 1 tablet qd
PhosLo, 1 tablet tid
Vasotec, 20 mg bid
Cardizem, 90 mg tid
Novolin 70/30, 25 U q am, 15 U q pm
Pravachol, 20 mg qd
Rocaltrol, 0.25 mcg qd
Feldene, 20 mg qd
Kenalog in Orabase, apply as directed
Synthroid, 0.1 mg qd
Elavil, 25 mg q hs

Atarax, 25 mg tid and prn for itching
Reglan, 5 mg 30 min ac & hs
Compazine tablets, 10 mg prn
Compazine suppositories, 25 mg prn
Cortisporin Otic Suspension, 4 drops qid
Senokot, prn for constipation
Sorbitol (70%), 30 to 1500 ml for constipation
Quinine, 260 mg q hs for cramps

Medical Problems:

Renal failure
Constipation
Diabetes
Hyperlipidemia

Case #8

Lou is a 78-year-old man.

Medication History:

Hydrochlorothiazide, 25 mg ½ tab qd
Doxazosin, 4 mg qd
Amlodipine, 5 mg qd
Furosemide, 40 mg qd
Digoxin, 0.25 mg qd
Clonidine, 0.1 mg bid

Medical Problems:

Hypertension
Congestive heart failure
Benign prostatic hypertrophy
Hearing impaired

Case #9

Inez is a 61-year-old woman.

Medication History:

Imitrex, 50 mg prn
Levoxyl, 0.125 mg qd
Felodipine, 10 mg qd
Clonazepam, 0.5 mg qd
Imipramine, 100 mg hs
Propoxyphene N/APAP 100/650, 1-2 q4h
Diclofenac, 75 mg tid
Cyclobenzaprine, 10 mg tid
Omeprazole, 20 mg qd
Esterified estrogens, 0.625 mg qd

Medical Problems:

Headache, migraine
Sore back and neck
Hypothyroidism
Hysterectomy

Case #10

Henry is a 35-year-old man.

Medication History:

Clonazepam, 0.5 mg qd
Levothyroxine, 0.025 mg qd
Benztropine mesylate, 1 mg bid
Haloperidol, 1 mg tid
Effexor-XR, 150 mg qd

Medical Problems:

Schizophrenia
Hypothyroidism
"Nervous"