



Therapeutics

**collected past papers
for final exam's
material**



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This file was gathered from all past paper files on JUMED 018, 019, 020 (special thanks to our colleagues who prepared original files)

Good luck!

by: Insaf Iyad

DM

Therapy of Diabetes Mellitus

1) The drug that destroys the beta cells of pancreas?

Pentamidine.

2) Which of the following drugs cause DM type 2?

Cyclosporine.

3) Which of the following drugs is not known to cause diabetes?

Spironolactone.

4) Drug causes type 1 DM?

Pyriminil.

5) Which of the following drugs can induce diabetes mellitus by destroying pancreatic B cells?

A. Glucocorticoids

B. Interferon

C. Nicotinic acid

D. Diazoxide

E. Growth hormone

Answer: B

6) Diabetic patient with HTN treated with?

ACEI.

7) 10-year-old boy known to have type 1 diabetes managed with insulin. Presented to the ER in a coma. He previously had convulsions and physical examination revealed tachycardia and sweating. What is the most likely cause?

Hypoglycemia from high dose insulin.

8) Insulin for DKA and HHS?

Crystalline zinc insulin.

✓✓ 9) A 2-year-old with type 1 DM. Presented with coma, hyperglycemia and acidosis. Best insulin to be used is?
IV zink insulin.

✓✓ 10) Patient with type 1 DM developed diabetic ketoacidosis was admitted to ER, you are going to give?
IV regular insulin (zinc crystalline).

✓✓ 11) A 5-year-old boy presented to the emergency room with coma and rapid breathing. The mother told you his problem started withing the last 24 hours with excessive urination and thirst followed by nausea and vomiting. Urine examination was positive for glucose and ketones. Measurement of blood glucose showed hyperglycemia with blood glucose level of 400 mg/dL. Which of the following is the treatment of choice?

A. Subcutaneous insulin

B. Insulin detemir

C. NPH insulin

D. Regular insulin

E. Insulin glargine

Answer: D

12) Used to prevent DM 2?

Metformin.

13) Which of the following mimic the physiology of insulin secretion?

Lispro (7 am), lispro (11 am), lispro (5 pm), glargine (bedtime).

14) An 18-year-old with type 1 DM. On 4-dose treatment in insulin lispro and NPH. He developed erratic postprandial glycemic control. Best choice is?
Pramlintide.

✓✓ 15) Diabetic patient with type 1 has a post prandial hyperglycemia even with appropriate dosing with insulin, you are going to add:
Pramlintide.

16) I am a drug that decrease gastric emptying, decrease postprandial glucose and can cause moderate weight loss?
Pramlintide.

17) Wrong about pramlintide?
Can be mixed with insulin.

✓✓ 18) Patient with type 2 diabetes, you begin, after lifestyle modifications, with?
Metformin.

✓✓ 19) An obese female with type 2 diabetes and her insulin blood levels were high. What is the most appropriate therapy?
Metformin.

20) A 50-year-old obese woman (BMI = 30) has diabetes for 10 years and is poorly controlled on diet and life-style modification. Her insulin blood level was higher than expected reference value. Which of the following drugs is a reasonable treatment to start?

- A. Metformin
- B. Repaglinide
- C. Rosiglitazone
- D. Pramlintide
- E. Glipizide

Answer: A

21) A man was diagnosed with type 2 diabetes, he has normal weight, and he has fasting hyperglycemia. Which one of the following drugs is reasonable to start treatment with?
Glibenclamide.

[Note: this is a glyburide]

22) Combination which can delay the failure of beta cells of pancreas?
Metformin, rosiglitazone and Exenatide.

23) Which one of the following reduce gastric emptying, reduce appetite, stimulate the vagus nerve and stimulate release of insulin in response to oral meals?
GLP1.

24) Which one of the following drugs cause moderate weight loss and increase pancreatic beta cell mass by decreasing apoptosis?
Exenatide.

25) Which of the following drugs may produce acute pancreatitis?

- A. Metformin
- B. Exenatide
- C. Pramlintide
- D. Miglitol
- E. Glyburide

Answer: B

26) A diabetic patient in oral therapy developed tachycardia, sweating and fatigue, most likely cause?
Glimepiride.

27) Elderly man with type 2 diabetes managed with glyburide and many other drugs developed renal impairment then suffered from recurrent hypoglycemia. What drug should be discontinued?
Glyburide.

28) Which one of the following drug–side effect is mismatched?
Sitagliptin – hypertension.

29) Patient with type 2 diabetes has uncontrolled HTN and heart failure which one of the following drugs is contraindicated?
Pioglitazone.

✓✓ 30) Diabetic patient with heart failure, do not use?
Rosiglitazone.

31) All of the following about antidiabetic medication is true except?
Metformin causes lactic acidosis in alcoholics and patients with lung disease.

32) Which of the following drugs precipitate or exacerbate heart failure by causing sodium and fluid retention?
A. Verapamil
B. Propafenone
C. Cyclophosphamide
D. Rosiglitazone
E. Etanercept
Answer: D

33) Which of the following drugs used in type 2 diabetes mellitus is NOT matched with a recognized adverse effect?
A. Pramlintide – Anorexia
B. Glyburide – Hepatotoxicity
C. Sitagliptin – Nasopharyngitis
D. Metformin – Lipodystrophy
E. Acarbose – abdominal distention
Answer: D

34) Which of the following drugs used in type 2 diabetes mellitus is NOT matched with a recognized adverse effect?
A. Glyburide – hypoglycemia
B. Pramlintide – anorexia
C. Insulin – weight gain
D. Sitagliptin – nasopharyngitis
E. Miglitol – lactic acidosis
Answer: E

35) DM with osteoporosis on metformin and SU not controlled?
Sitagliptin.

[Note: Thiazolidinediones (pioglitazone and rosiglitazone) + canagliflozin (SGLT–2 inhibitors) are associated with osteoporosis]

36) DM and hospitalized?
Insulin.

37) Patient with DM on metformin and repaglinide and still he do not achieve a glycemic control, so you add?
–Answers were not mentioned–

38) Wrong match:

Omega 3 – hyperuricemia.

39) Common side effect of all antidiabetics:

Hypoglycemia.

40) Doesn't cause insulin resistance:

- A. Nicotinic acid
- B. Growth hormone
- C. Diasoxide
- D. Clozapine
- E. Chronic alcoholism

Answer: C

41) Not appropriate for obese patient with DM:

Glibenclamide.

42) Doesn't prevent DM:

- A. Rapaglinde
- B. Liraglutide
- C. Metformin
- D. Wt. reduction
- E. Physical exercise

Answer: A

43) Crystalline Zinc insulin.

44) Wrong:

Metformin with severe renal impairment.

Extra past papers (collected from different files on ju med)

DM

1. Which of the following drugs is a sodium glucose cotransporter-2 (SGLT-2) inhibitor used in the treatment of type 2 diabetes?

- a. Metformin
- b. Empagliflozin
- c. Glimepiride
- d. Sitagliptin

Answer: b

2. A patient with type 2 diabetes and obesity is prescribed a medication that decreases hepatic glucose production and improves insulin sensitivity. Which medication is most likely prescribed?

- a. Pioglitazone
- b. Acarbose
- c. Repaglinide
- d. Liraglutide

Answer: a

3. Which of the following medications acts by inhibiting the breakdown of incretin hormones, leading to increased insulin secretion and decreased glucagon release?

- a. Metformin
- b. Exenatide
- c. Canagliflozin
- d. Rosiglitazone

Answer: b

4. A patient with type 2 diabetes is prescribed a medication that stimulates insulin release from pancreatic beta cells in a glucose-dependent manner. Which medication is most likely prescribed?

- a. Metformin
- b. Glipizide
- c. Saxagliptin
- d. Pramlintide

Answer: b

5. Which of the following medications is a longacting insulin analog that provides basal insulin coverage with a duration of action up to 24 hours?

- a. Regular insulin
- b. Insulin aspart
- c. Insulin glargine
- d. Insulin lispro

Answer: c

6. A patient with type 1 diabetes requires mealtime insulin coverage. Which of the following insulins is a rapid-acting insulin analog with a quick onset of action?

- a. Insulin glulisine
- b. Insulin detemir
- c. Insulin NPH
- d. Insulin degludec

Answer: a

7. Which of the following medications is a dipeptidyl peptidase-4 (DPP-4) inhibitor used in the treatment of type 2 diabetes?

- a. Metformin
- b. Sitagliptin
- c. Glimepiride
- d. Canagliflozin

Answer: b

8. A patient with type 2 diabetes and chronic kidney disease is prescribed a medication that lowers blood glucose by inhibiting glucose reabsorption in the kidneys. Which medication is most likely prescribed?

- a. Metformin
- b. Empagliflozin
- c. Insulin glargine
- d. Pioglitazone

Answer: b

9. Which of the following medications is a glucagon-like peptide-1 (GLP-1) receptor agonist used in the treatment of type 2 diabetes?

- a. Glipizide
- b. Pramlintide
- c. Liraglutide
- d. Repaglinide

Answer: c

10. A patient with type 2 diabetes is prescribed a medication that inhibits the breakdown of complex carbohydrates in the intestine, leading to a decrease in postprandial glucose levels. Which medication is most likely prescribed?

- a. Metformin
- b. Acarbose
- c. Saxagliptin
- d. Rosiglitazone

Answer: b

11. Which of the following regimens best mimics physiological insulin release?

- A. NPH and Lispro morning, midday, evening
- B. Lispro morning, midday, evening, glargine bedtime
- C. NPH morning and evening

Answer: B

12. Which of the following drug is considered a relatively safe drug for treating elderly patient with DM2?

- A. Insulin
- B. Sulfonylurea
- C. Dapagliflozin
- D. Sitagliptin
- E. Thiazolidinediones

Answer: D

13. Which of the following insulin regimens has the shortest duration of action:

- A. Insulin detemir
- B. Insulin lispro
- C. Insulin glargine

- D. NPH insulin
- E. Regular insulin

Answer: B

14. Which of the following drug induced DM is mismatched with mechanism:

- A. Cyclosporine-may cause insulin resistance
- B. Clozapine-weight gain and insulin resistance
- C. HIV protease inhibitors-relative hyperglucagonemia
- D. Interferon-beta cell destruction
- E. Nicotinic acid-increase hepatic glucose production

Answer: E

15. Which of the following isn't a contraindication of metformin:

- A. Congestive heart failure
- B. Dyslipidemia
- C. Renal failure
- D. Metabolic acidosis
- E. Respiratory disease

Answer: B

16. Which of the following Diabetes drugs is associated with weight loss:

- A. Insulin
- B. GLP 1 agonists
- C. Sulfonylureas
- D. Thiazolidinediones
- E. Meglitinides

Answer: B

17. Which of the following drugs is mismatched with its side effect:

- A. Canagliflozin-hypotension
- B. Sitagliptin-nasopharyngitis
- C. Exentide-acute pancreatitis
- D. Thiazolidinediones-thirst

Answer: D

18. Which of the following is NOT correct about diabetes management:

- A. All patients should do lifestyle modification
- B. Non obese patients are more likely given medications to increase insulin secretion
- C. Obesity-healthy eating diet to sustain weight loss
- D. Low dose Aspirin is given to ischemic heart disease patients for secondary cardioprotection
- E. Sulfonylureas for renal impairment

Answer: E

19. Which of the following best describes the use of pramlintide?

- A. It can be mixed with the same injection with insulin

- B. It should be used prior to meals to decrease post prandial hyperglycemia
- C. It can be substituted by some insulin doses

Answer: B

20) Drug that cause insulin resistance:

- A) glucocorticoid
- B) interferon
- C) pentamidine
- D) nicotinic acid

Ans: D

21) drug of choice in DM type 2 with atherosclerosis CVD :

- A) Exentide
- B) sitagliptin
- C) Glyburide
- D) Repaglinide
- E) rosiglitazone

Ans: A

22) not contraindication to use SGLT2 :

- A) recurrent UTI
- B) hypotension
- C) GFR (60)

Ans : C

23) mismatch Side effects:

Insulin => weight loss

24) all of the following prevent DM type 2 except :

- A) metformin
- B) rosiglitazone
- C) acarbose
- D) liraglutide
- E) teplizumab

Ans: E

25) incorrect regarding treatment of DM type 2:

- A) obese patients without contraindications treated with metformin
- B) non obese patients treated with insulin secretagogue
- C) TZD considered first line treatment of DM
- D) all diabetic patients should be started with lifestyle modification

Ans: C

8. Not used in DM prevention?

Glyburide

9. Direct DM case, which drug to start?

Metformin

10. Child with DKA in ER what to give?

Regular insulin

11. DM1 post prandial not controlled what to add with decreasing insulin?

Pramlintide

12. Patient with type 2 diabetes, you begin ,after life style modifications,with:

Metformin

13.the drug that destroys the beta cells of pancreas:

Pentamidine

14- A diabetic patient in oral therapy developed tachycardia, sweating and fatigue, most likely cause
glimepiride

15- A T1DM patient developed DKA, treatment

regular insulin

16-Which of the following is NOT a recognized adverse affect of anti diabetic medications?

- a) Metformin and fluid retention
- b) TZD and heart failure
- c) DDP-4 and hypoglycemia

Answer: A

17-All the following are considered true regarding medication error except:

- a) Medications errors constitute two thirds of medical errors
- b) They result in significant morbidity and mortality
- c) Medication errors lead to decreased patient satisfaction.
- d) Medication errors are unpreventable

Answer: D

18-Most serious side effect of diabetic drugs

- a) Hypoglycemia
- b) weight gain

Answer: A

19-A diabetic patient in oral therapy developed tachycardia, sweating and fatigue, most likely cause?

- a) Glimepiride
- b) Exenatide
- c) Pramlintide
- d) Sitagliptin
- e) Metformin

Answer: A

20-The main indication to use insulin in type 2 DM?

- a) Newly diagnosed DM

- b) HbA1c = 7%
- c) Progressive B-cell dysfunction

Answer: C

21-A 50-year-old obese woman (BMI = 30) has diabetes for 10 years and is poorly controlled on diet and life-style modification. Her insulin blood level was higher than expected reference value. Which of the following drugs is a reasonable treatment to start?

- a) Metformin
- b) Repaglinide
- c) Rosiglitazone
- d) Pramlintide
- e) Glipizide

Answer: A

22- 58 years, female, 15 years with controlled DM. Was diagnosed with HTN and IHD and started on thiazide, enalapril, simvastatin and aspirin. 1 month later her glycemic control was disrupted. Most likely cause is

Hydroxychlorothiazine

23- A 2 year old with type 1 DM. Presented with coma, hyperglycemia and acidosis. Best insulin to be used is

IV zinc insulin (removed)

24- An 18 year old with type 1 DM. On 4-dose treatment in insulin lispro and NPH. He developed erratic postprandial glycemic control. Best choice is

pramlintide

HTN

Therapy of Hypertension

1) All of the following agents can aggravate or precipitate hypertension, EXCEPT:

- A. Oral contraceptives
- B. Paracetamol
- C. Decongestants
- D. Corticosteroids
- E. NSAIDs

Answer: B

2) A 65-year-old with HTN in beta blocker, ACEI, Aspirin and simvastatin. He developed a flu and took diphenhydramine, phenylephrine, and guanfacine (and another drug). His blood pressure increased. Most likely cause?

Phenylephrine.

3) A patient suspects having HTN because of family history, next step?

Daily self-monitoring with approved automated device.

4) According to newest JNC guidelines what is the management of stage 1 hypertension?

Lifestyle modifications and one antihypertensive.

5) First line agents for HTN?

ACEi, ARB, CCB and thiazide.

6) A 42-year-old white female was diagnosed with persistent blood pressure at 140/90. Best management?

Lifestyle modification and thiazide.

7) Wrong combination in the treatment of stage 2 HTN?

Beta blockers and hydralazine.

8) Uncontrolled HTN, on beta blocker, next step?

Add enalapril.

9) About lifestyle modifications which of the following is incorrect?

Exercise for 120 minutes weekly.

10) Which of the following combinations is indicated for treatment of hypertension in a patient also having heart failure with reduced ejection fraction?

- A. Nitroglycerin, furosemide, hydralazine
- B. Indapamide, hydralazine, methyldopa
- C. Spironolactone, atenolol, lisinopril
- D. Valsartan, propranolol, hydrochlorothiazide
- E. Lisinopril, furosemide, bisoprolol

Answer: E

11) Main drug in patient with HTN and coronary artery disease?

Beta blockers.

12) 58 years, female, 15 years with controlled DM. Was diagnosed with HTN and IHD and started on thiazide, enalapril, simvastatin and aspirin. 1 month later her glycemic control was disrupted. Most likely cause is?

Hydrochlorothiazide.

13) A patient with DM type 2, CKD stage 3. His blood pressure measured 155/92 and his creatinine 2.3. He receives enalapril. Best modification of treatment?

Increase enalapril dose.

14) Hypertensive patient managed by Enalapril, metoprolol and stuff. His hypertension is not controlled. What is the most appropriate next step in management?

Increase dose of Enalapril.

15) To prevent recurrent stroke?

You choose thiazide.

16) Which of the following is a reasonable antihypertensive choice in elderly patients?

- A. Diltiazem
- B. Methyldopa
- C. Atenolol
- D. Clonidine
- E. Amlodipine

Answer: E

17) An antihypertensive drug you don't use in COPD?

Lisinopril.

18) Peripheral arterial disease and hypertension?

Carvedilol.

19) Which of the following antihypertensive drugs should be monitored by measuring serum electrolytes?

- A. Atenolol
- B. Verapamil
- C. Methyldopa
- D. Hydrochlorothiazide
- E. Bisoprolol

Answer: D

20) Which of the following antihypertensive drugs should be monitored by measuring serum electrolytes?

- A. Methyldopa
- B. Bisoprolol
- C. Valsartan
- D. Diltiazem
- E. Atenolol

Answer: C

21) Hypertensive emergency?

DON'T decrease BP < 140/90 immediately.

22) Wrong about hypertensive urgency?

Use rapid release nifedipine.

23) Which of the following antihypertensive agents is a good choice for treatment of hypertensive emergencies?

- A. Hydralazine
- B. Bisoprolol
- C. Furosemide
- D. Labetalol
- E. Nifedipine

Answer: D

24) Which of the following antihypertensive agents is NOT a good choice for treatment of hypertensive urgencies?

- A. Nifedipine
- B. Clonidine
- C. Labetalol
- D. Captopril

Answer: A

25) Wrong about hypertensive emergency?

You have to normalize the blood pressure in case of acute ischemic stroke within 36 hours.

26) Which of the following antihypertensives is NOT matched with an appropriate special indication in patients with emergency hypertension?

- A. Fenoldopam – renal insufficiency
- B. Esmolol – aortic dissection
- C. Nicardipine – myocardial ischemia
- D. Hydralazine – eclampsia
- E. Enalaprilat – eclampsia

Answer: E

27) Hydralazine?

Not risk factor for hyperkalemia

28) Hypertensive emergency don't reduce to 130.

29) Long acting dihydropyridine suitable for elderly.

30) Metoprolol with CAD.

31) COPD don't give beta blocker.

HTN

1-according to newest JNC guidelines what is the management of stage 1 hypertension ?

Lifestyle modifications and one antihypertensive

2-about lifestyle modifications which of the following is incorrect ?

Exercise for 120 minutes weekly

3-hypertensive patient managed by Enalapril , metoprolol and stuff . His hypertension is not controlled .

What is the most appropriate next step in management ?

Increase dose of Enalapril

4)all of the following cause HTN except :

A)Darbepoetin

B)cocaine

C)bradykinin

Ans: C

5)all of the following are first line treatment of HTN except :

A)ACEI

B)ARBs

D) Thiazide

D) CCB

E)alpha 1 blocker

Ans: E

6)incorrect :

Use BB to treat HTN in diabetic patient

11)true in hypertensive urgency :

A) we use labetalol

B) normalise blood pressure in few hours

C) use nifedipine

Ans: A

7)mismatch side effect:

A) NTG=> tolerance

B)enalaprilat=> fall in pressure in high renin

C)fenoldopam => bronchoconstriction

Ans: C

8)anti HTN drug used in elderly:

A)alpha 2 agonist

B) thiazide

Ans:B

9. 35 yrs old on 3 HTN drugs, Wrong about lifestyle modification?

a. A diet rich in fruits, vegetables

b. reduced content of saturated and total fat

c. Reduce daily dietary sodium intake 1.5g/day

- d. 3 to 4 sessions/wk, lasting an average of 40 min/session, and involving moderate- to vigorous intensity physical activity
- e. lifestyle can reduce his number of drugs

Answer: E

10. Wrong match about AntiHTN drugs? with PAD use propranolol + hydralazine

11. wrong about HTN tx? BB can be given to patient on inotropic agents

12. Old 75 came with wife HTN 20 Yrs + don't like to take meds, financial no problems, cognitive he forget sons names, not oriented to time, what is the cause?

- a. Adverse effect and cognitive problems,
- b. adverse effect and complex regimen

Answer: A

13. Wrong about hypertensive urgency Use rapid acting sublingual nifedipine

14.to prevent recurrent stroke: You choose thiazide

15. Which of the following drugs you monitor by heart rate:

Verapamil

16. An antihypertensive drug you don't you use in COPD: Lisinopril

17- A patient suspects having HTN because of family history, next step

daily self monitoring with approved automated device

18- Uncontrolled HTN, on beta blocker, next step

add enalapril

19)drug doesn't affect gastric motility:

Verapamil

20)all are enzyme inhibitors except:

Carbamazepine

21)HTN case take antihypertensive drugs diagnosed with tb and take anti tuberculosis drugs after that the bp increased and doesn't respond to drugs the drug that cause this condition is :

Rifampin

22-Not a mechanism of drug induced HTN:

- a) Ergots- renin secretion
- b) Bevacizumab- inhibition of VEGF- mediated vasodilation
- c) Corticosteroids-fluid retention
- d) Licorice- aldosterone-like action

Answer: A

28-Alternative for ACEI and ARBs :

- a) Spironolactone + hydralazine
- b) Digoxin + isosorbide dinitrate

- c) Sacubitril + hydralazine
- d) Isosorbide dinitrate + hydralazine
- e) Diltiazem + ivabradine

Answer: D

29-Treatment of choice for hypertension in elderly

- a) Hydrochlorothiazide
- b) Furosimide
- c) Clonidine

Answer: A

30-Which of the following anti-hypertensive drugs should be avoided in COPD patients?

- a) CCB
- b) Diuretics
- c) ACEi

Answer: C

31-Which of the following is not used in hypertensive emergency:

- a) Nicardipine
- b) Nifedipine
- c) Esmolol
- d) Nitroglycerin
- e) Sodium nitroprusside

Answer: B

32- Which of the following are cautions of using fenoldopam?

- a) Sympathetic activity and glaucoma
- b) Bradycardia and hypotension
- c) Left ventricular failure
- d) Aortic stenosis

Answer: A

33- A 42 year old white female was diagnosed with persistent blood pressure at 140/90. Best management life style modification and thiazide

34- A patient with DM type 2, CKD stage 3. His blood pressure measured 155/92 and his creatinine 2.3. He receives enalapril. Best modification of treatment: increase enalapril dose

35- A 65 year old with HTN in beta blocker, ACEI, Aspirin and simvastatin. He developed a flu and took diphenhydramine, phenylephrine, and guanfacine (and another drug). His blood pressure increased. Most likely cause: phenylephrine

36- A patient developed acute dyspnea after hearing bad news. She has bilateral crackles, high JVP, decreased capillary filling. Which drug shouldn't be used
IV metoprolol

37- A patient with IHD and HTN. He has heart failure with symptoms on less than ordinary exertion. He takes enalapril, bisoprolol, Aspirin and statin. Best modification on treatment
add spironolactone.

ACS

Therapy of Acute Coronary Syndromes

1) Disadvantage of using morphine in acute coronary syndrome?

Slows the aspirin absorption.

2) Certain drugs should be initiated prior to hospital discharge for secondary prevention of myocardial infarction. These drugs were proven to decrease mortality, heart failure, re-infarction or stroke, and stent thrombosis. Which of the following combination is known to achieve these goals?

A. Aspirin + ACE inhibitors + high intensity statins + organic nitrates

B. Aspirin + ACE inhibitors + high intensity statins + amlodipine

C. Aspirin + ACE inhibitors + high intensity statins + bisoprolol

D. Aspirin + ACE inhibitors + high intensity statins + clopidogrel

E. Aspirin + ACE inhibitors + high intensity statins + verapamil

Answer: C

3) Secondary prevention x 4?

Statin, Aspirin, ACEI, B-blocker.

4) All decrease mortality in acute coronary syndrome except?

Morphine.

5) Doesn't prevent remodeling?

Loop diuretics.

6) Which of the following is NOT correct about the use of fibrinolytic therapy in patients with ST-elevation myocardial infarction?

A. In the absence of contraindication to fibrinolytic therapy.

B. It is indicated when performing percutaneous coronary intervention is lacking.

C. It is indicated when transfer of the patient to a facility capable of performing percutaneous coronary intervention is impossible.

D. It may be given within 12 hours of onset of symptoms.

E. When patient presentation is delayed beyond 24 hours.

Answer: E

7) Not a contraindication for alteplase?

History of streptokinase use.

8) Which of the following is NOT an indication to the use of anticoagulants in acute coronary syndromes?

A. For patients undergoing fibrinolysis

B. For patients undergoing primary percutaneous coronary intervention

C. For patients with a contraindication to reperfusion therapy

D. For patient with non-ST-elevation acute coronary syndrome

Answer:

(I think that all the above are indications to the use of anticoagulants, please refer to slides 26+27+38)

9) Which of the following anticoagulants is NOT matched with the appropriate duration of therapy in patients with acute coronary syndromes?

A. Bivalirudin – up to 3 days

B. Enoxaparin – up to 8 days

C. Unfractionated heparin – 2 days

D. Fondaparinux – 21 days

Answer: D

10) Correct match of duration?

Clopidogrel – 12 months

11) Mismatch?

Enoxaparin – 21 days

✓✓ 12) Not a benefit from using IV beta blocker?

Early Cardiogenic shock.

13) Which of the following is NOT correct concerning the use of spironolactone to reduce mortality in acute coronary syndrome?

A. The patient should have either heart failure symptoms or diabetes mellitus.

B. The patient should have an ejection fraction of at least 0.55

C. The patient should have started beta-blockers.

D. Monitoring of serum potassium is essential to prevent hyperkalemia.

E. The patient should have started ACE inhibitors.

Answer: B

14) Post MI drugs?

Bisoprolol plus lisinopril and statin.

15) Drug that doesn't prevent remodeling: Nitroglycerin.

16) Wrong match:

Nitroglycerin – Hypotension & Bradycardia

17) Aspirin, Statin, Beta-Blocker, ARB

ACS

1. What is a disadvantage of using morphine in acute coronary syndrome?

- a. Slows the aspirin absorption
- b. Increases bleeding risk
- c. Delays reperfusion
- d. Impairs platelet function

Answer: a

2. Which combination of drugs is known to achieve the goals of decreasing mortality, heart failure, re-infarction or stroke, and stent thrombosis in secondary prevention of myocardial infarction?

- a. Aspirin + ACE inhibitors + high-intensity statins + organic nitrates
- b. Aspirin + ACE inhibitors + high-intensity statins + amlodipine
- c. Aspirin + ACE inhibitors + high-intensity statins + bisoprolol
- d. Aspirin + ACE inhibitors + high-intensity statins + clopidogrel
- e. Aspirin + ACE inhibitors + high-intensity statins + verapamil

Answer: c

3. Which of the following drugs does NOT decrease mortality in acute coronary syndrome?

- a. Aspirin
- b. ACE inhibitors
- c. High-intensity statins
- d. Morphine

Answer: d

4. Which of the following drugs does NOT prevent remodeling in acute coronary syndrome?

- a. Aspirin
- b. ACE inhibitors
- c. High-intensity statins
- d. Loop diuretics

Answer: d

5. Which of the following statements is NOT correct about the use of fibrinolytic therapy in patients with ST-elevation myocardial infarction?

- a. In the absence of contraindication to fibrinolytic therapy
- b. It is indicated when performing percutaneous coronary intervention is lacking
- c. It is indicated when transfer of the patient to a facility capable of performing percutaneous coronary intervention is impossible
- d. It may be given within 12 hours of onset of symptoms
- e. When patient presentation is delayed beyond 24 hours

Answer: e

6. What is NOT a contraindication for the use of alteplase?

- a. History of streptokinase use
- b. Active bleeding
- c. Recent major surgery
- d. Intracranial hemorrhage

Answer: a

7. Which of the following is NOT an indication for the use of anticoagulants in acute coronary syndromes?

- a. For patients undergoing fibrinolysis
- b. For patients undergoing primary percutaneous coronary intervention
- c. For patients with a contraindication to reperfusion therapy
- d. For patients with non-ST-elevation acute coronary syndrome

Answer: d

8. Which of the following anticoagulants is NOT matched with the appropriate duration of therapy in patients with acute coronary syndromes?

- a. Bivalirudin - up to 3 days
- b. Enoxaparin - up to 8 days
- c. Unfractionated heparin - 2 days
- d. Fondaparinux - 21 days

Answer: d

9)all of the following drugs used within 1st 24 hour in ACS except :

- A)BB
- B) fibrinolytic
- C)ACEI

Ans: B

10)all of the following used for ACS secondary prevention except :

- A)ACEI
- B) BB
- C)non dihydropyridine CCB

Ans:C

11. No effect on mortality in ACS?

- a. Morphine
- b. Aldo antagonist
- c. ACIE

Answer: A

12. Wrong about STEMI?

- a. aggressive statin before PCI
- b. an ACE-Inhibitor should be started in all patients with LEF <0.4 one week after the ACS

Answer: B

13.post MI drugs:

Bisoprolol plus lisinopril and statin

14.disadvantage of using morphine in acute coronary syndrome :

Slows the aspirin absorption

15-Which of the following must be added before discharge for secondary prevention of MI to this regimen: ACEi, beta blocker, and aspirin

- a) High intensity statin
- b) Clopidogrel

Answer: A

HF

Therapy of Chronic Heart Failure

✓✓ 1) Which of the following drugs precipitate or exacerbate heart failure by causing cardiotoxicity?

- A. Disopyramide
- B. Diltiazem
- C. Propranolol
- D. Bevacizumab
- E. Rosiglitazone

Answer: D

2) Which of the following antihypertensives may be associated with cardiac decompensation and heart block as adverse reactions?

- A. Valsartan
- B. Diltiazem
- C. Amlodipine
- D. Hydralazine
- E. Lisinopril

Answer: B

3) Cause sodium and water retention in heart failure?

Ticarcillin disodium.

4) Loop diuretics should be used at lower doses in patients with preserved ejection fraction heart failure because of all of the following, EXCEPT:

- A. Development of renal hypoperfusion
- B. Development of renal failure
- C. Reduction of prostaglandin synthesis
- D. Development of hypotension
- E. Development of low cardiac output

Answer: C

5) In a patient with hypertension, dyslipidemia and diabetes mellitus but with NO structural heart disease, drugs may be given to prevent heart failure development. Which of the following pair of drugs is useful in this regard?

- A. Loop diuretic + verapamil
- B. ACEIs + beta-blockers
- C. Thiazide diuretic + spironolactone
- D. Amlodipine + loop diuretic
- E. ACEIs + statins

Answer: E

6) Stage B HF?

Statin, BB, ACEi.

7) Patient with hypertension and heart failure without symptoms, you choose which of the following to improve mortality?

Bisoprolol plus statin plus valsartan.

8) Not used in HFrEF?

Amlodipine.

9) Verapamil?

Not used in HFrEF.

✓✓ 10) Which of the following combination of drugs may be used in treatment of heart failure when there is a contraindication to the use of ACE inhibitors or angiotensin receptor blockers?

- A. Spironolactone + hydralazine
- B. Digoxin + isosorbide dinitrate
- C. Sacubitril + hydralazine
- D. Diltiazem + ivabradine
- E. Isosorbide dinitrate + hydralazine

Answer: E

11) Which of the following drugs may be used in heart failure in patients having a contraindication to the use of beta-adrenergic blockers?

- A. Sacubitril
- B. Digoxin
- C. Valsartan
- D. Sacubitril + valsartan
- E. Ivabradine

Answer: E

12) Which of the following is NOT reduced by ACE inhibitors therapy during treatment of heart failure?

- A. Ventricular remodeling
- B. Myocardial fibrosis
- C. Norepinephrine release
- D. Sodium and water retention
- E. Vasodilator prostaglandins

Answer: E

13) A patient with HFrEF, IHD, BP 110/72, creatinine 2.5, on ACEI, furosemide and beta blocker, next step? Increase lisinopril dose.

✓✓ 14) Patient received bad news and had acute onset chest pain. Exam revealed elevated JVP, S3 heart sound, crackles and a pulse of 180. Which of the following drugs should not be used?

IV metoprolol.

15) Carvedilol?

Not used in patient presented with acute decompensated HF.

16) Which of the following is NOT correct concerning the use of spironolactone in heart failure?

- A. It attenuates cardiac fibrosis
- B. It reduces mortality
- C. It inhibits cardiac collagen deposition
- D. It enhances calcium excretion
- E. It attenuates atherogenesis

Answer: D

17) Not a complication when using ivabradine?

- A. Atrial fibrillation
- B. Vision problem
- C. Hypotension

Answer:

(All of the above are adverse effects of ivabradine)

✓✓✓ 18) A patient with IHD and HTN. He has heart failure with symptoms on less than ordinary exertion. He takes enalapril, bisoprolol, Aspirin and statin. Best modification on treatment?

Add spironolactone.

19) Not common side effect between dihydropyridine and non-dihydropyridine?

- A. Headache
- B. Flushing
- C. Dizziness
- D. Edema
- E. Bradycardia

Answer: E

20) Furosemide spironolactone –pril – for HF patient.

21) Prostaglandin E is not involved in pathogenesis of CHF.

22) Spironolactone and high dose in renal impairment incorrect.

23) Uzumab for cardiotoxicity.

HF

1) incorrect about HFpEF & HFrEF :

No role of RAAS in treatment of HFpEF

2) all true in management of pre HF except :

Valsartan/Sacubitril (ARNi)

3) incorrect :

Digoxin reduce mortality

4) incorrect :

add ARNi to ACEi to treat HF

5) mismatch side effect :

A) ivabredine => a fib & bradycardia

B) hydralazine & Isosorbide dinitrate => bradycardia

Ans: B

6. mismatch:

Clevidipine.... Acute heart failure

7. Not a complication when using ivabradine:

Atrial fibrillation, vision problem, hypotension ??

8. Not a benefit from using IV beta blocker:

Early Cardiogenic shock

9. Not indication to use beta blocker:

Patient with heart failure with inotropic agent

10. Cause sodium and water retention in heart failure :

Ticarcillin disodium

11. alternative for ACE and beta blockers for heart failure patients;

Isosorbide dinitrate plus hydralazine

12. contraindicated in heart failure :

Rosiglitazone

13- A patient with HFrEF, IHD, BP 110/72, creatinine 2.5, on ACEI, furosemide and beta blocker, next step increase lisinopril dose

14- Which of the following should not be prescribed in a patient with hypertension and chronic heart failure?

a) Furosemide

b) Propranolol

c) Spironolactone

d) Enalapril

e) Candesartan

Answer: B

15-All of the following are correct regarding the use of diuretics in treatment of heart failure except:

- a) Diuretics stop the disease progression in HF
- b) The doses of diuretics used to treat HFpEF are much smaller than those used to treat HFrEF
- c) Diuretics lead to reduction of symptoms associated with fluid retention
- d) Diuretics lead to Improvement of exercise tolerance and quality of life

Answer: A

16-Which of the following drugs should not be used in chronic heart failure and may cause decompensation?

- a) Valsartan
- b) Diltiazem
- c) Amlodipine
- d) Lisinopril

Answer: B

17- Which of the following precipitates heart failure by having a negative inotropic effect?

- a) Diltiazem
- b) Flecainide
- c) Doxorubicin
- d) NSAIDs

Answer: A and B (two correct answers)

medication errors

Medication Errors

1. Medication errors can occur due to mistakes made by which of the following healthcare professionals?

- A) Physicians
- B) Pharmacists
- C) Nurses
- D) All of the above

Answer: D

2. How many prescription medications are available in the United States?

- A) Approximately 500
- B) Approximately 2,000
- C) Approximately 6,800
- D) Approximately 10,000

Answer: C

3. Medication errors are associated with an added risk to patients when there are interactions among:

- A) Prescription medications only
- B) Over-the-counter drugs only
- C) Health supplements, herbs, and alternative medicines only
- D) All of the above

Answer: D

4. According to a Johns Hopkins study, what is the ranking of medical errors, including medication errors, as a cause of death in the USA?

- A) First-leading cause of death
- B) Second-leading cause of death
- C) Third-leading cause of death
- D) Fourth-leading cause of death

Answer: C

5. Which of the following is the definition of a medication error?

- A) Any preventable event that may cause inappropriate medication use or patient harm while the medication is in the control of the healthcare professional or the patient.
- B) Any adverse drug reaction experienced by a patient.
- C) Any error made during the compounding process of a medication.
- D) Any error in documenting a patient's medication history.

Answer: A

6. Which of the following is a common reason for medication errors?

- A) Failure to communicate drug orders
- B) Illegible handwriting
- C) Confusion over similarly named drugs
- D) All of the above

Answer: D

7. Medication errors can be due to human errors and a flawed system. What does a flawed system refer to?

- A) A system that is weak and imperfect, with inadequate backup to detect mistakes.
- B) A system that is overly strict and inflexible, leading to mistakes.

- C) A system that is too complex and difficult to understand, leading to mistakes.
- D) A system that is outdated and needs to be replaced, leading to mistakes.

Answer: A

8. At which point in the medication process do medication errors usually occur most commonly?

- A) Ordering/prescribing
- B) Administration
- C) Monitoring
- D) Dispensing

Answer: A

9. What is one of the most common system failures contributing to medication errors?

- A) Inaccurate order transcription
- B) Drug knowledge dissemination
- C) Failing to obtain allergy history
- D) Poor professional communication

Answer: A

10. Which patient populations are particularly sensitive to medication errors?

- A) Elderly and children
- B) Adults and teenagers
- C) Pregnant women and infants
- D) Middle-aged and adolescents

Answer: A

11. Medication errors can occur in which of the following steps of the medication process?

- A) Professional practice
- B) Health care products
- C) Procedures and systems, including prescribing
- D) Order communication
- E) All of the above

Answer: E

12. Which of the following is NOT a common reason for medication errors?

- A) Failure to communicate drug orders
- B) Illegible handwriting
- C) Incorrect drug selection from a drop-down menu
- D) Accurate use of similar drug names
- E) Errors involving dosing units or weight

Answer: D

13. Medication errors can be due to:

- A) Human errors
- B) Flawed system with inadequate backup to detect mistakes
- C) Both A and B
- D) Neither A nor B

Answer: C

14. Ordering/prescribing errors account for approximately what percentage of medication errors?

- A) 10%
- B) 25%
- C) 50%
- D) 75%
- E) 100%

Answer: C

15. Which of the following is an administration error?

- A) Incorrect route of administration
- B) Giving the drug to the wrong patient
- C) Extra dose
- D) All of the above
- E) None of the above

Answer: D

16. Monitoring errors can include failing to take into account:

- A) Patient liver and renal function
- B) Patient allergies
- C) Potential drug interactions
- D) All of the above
- E) None of the above

Answer: D

17. Which of the following is NOT a common system failure contributing to medication errors?

- A) Inaccurate order transcription
- B) Drug knowledge dissemination
- C) Failing to obtain allergy history
- D) Adequate order checking
- E) Poor professional communication

Answer: D

18. Expired products can result in medication errors due to:

- A) Improper storage
- B) Use of expired products
- C) Both A and B
- D) Neither A nor B

Answer: C

19. Incorrect strength of medication can occur due to:

- A) Calculation errors
- B) Incorrect conversion of units
- C) Both A and B
- D) Neither A nor B

Answer: C

20. Which of the following strategies can help prevent medication errors?

- A) Implementing medication safety protocols

- B) Conducting regular medication reconciliation
- C) Enhancing patient education on medications
- D) All of the above
- E) None of the above

Answer: D

21. What is the role of healthcare professionals in preventing medication errors?

- A) Following established protocols and guidelines
- B) Practicing effective communication and teamwork
- C) Reporting and learning from errors
- D) All of the above
- E) None of the above

Answer: D

22-What is the most common cause of medical errors for physicians:

- a) Judgment error
- b) Mechanical error
- c) Distraction

Answer: C

23-Most common time for medication error:

- a) Prescription
- b) Dispensing

Answer: A

24-Which of the following is not a preferred prescription:

- a) 2.0 mg 3 times daily
- b) 20 mg 3 times daily

Answer: A

25-All of the following are examples of distortion except:

- a) Poor handwriting
- b) The use of abbreviations
- c) Substitution of the drug prescribed for a similar drug
- d) Giving the drug to the wrong patient

Answer: D

**therapy of certain
disorders during
pregnancy**

THERAPY OF CERTAIN DISORDERS DURING PREGNANCY

1) A pregnant woman is complaining of constipation and hemorrhoids. First line of treatment is?

Advise her to increase her fiber and fluid intake.

2) Which of the following is a reasonably safe first choice if dietary fibers fail to relieve constipation during pregnancy?

- A. Bisacodyl
- B. Castor oil
- C. Psyllium
- D. Senna
- E. Magnesium sulfate

Answer: C

** 3) Which of the following laxatives should be avoided for treatment of constipation during pregnancy?

- a. Lactulose
- b. Psyllium
- c. Methylcellulose
- d. Dietary fiber
- e. Castor oil

Answer: E

** 4) A 25-year-old overweight pregnant female in her second trimester complains of heartburn and epigastric pain when she lies down and during sleep. After examination, you diagnosed her as a case of gastroesophageal reflux disease. You advised her to modify life-style and diet, but without sufficient success. Which of the following is NOT acceptable therapy?

- a. Ranitidine
- b. Sodium bicarbonate
- c. Omeprazole
- d. Sucralfate
- e. Aluminum and magnesium hydroxides mixture (Maalox)

Answer: B

5) Best drug for the management of eclamptic seizures?

IV magnesium sulfate.

6) Pregnant developed DVT, first line anticoagulation?

LMWH.

7) Pregnant woman urine analysis is positive for nitrite and leukocytes even though she is asymptomatic. What is the most appropriate management?

Nitrofurantoin.

*** 8) Pregnant with pyelonephritis with E. coli?

Ceftriaxone.

9) Which of the following drugs you would select for treatment of pyelonephritis during pregnancy?

- a. Levofloxacin
- b. Co-trimoxazole
- c. Cefuroxime
- d. Nitrofurantoin
- e. Amoxicillin

Answer: C

10) Pregnant woman with long history of type 2 diabetes and two miscarriages. Her diabetes is poorly controlled on metformin and glyburide. Her HbA1c is 8.5 what is the most appropriate next step in management?

Discontinue all medications and start her on insulin.

11) Which of the following antiepileptic drugs has the highest risk during pregnancy?

- A. Valproic acid
- B. Phenytoin
- C. Carbamazepine
- D. Lamotrigine
- E. Gabapentin

Answer: A

12) A woman with long history of hypertension poorly controlled despite many medications found out that she is pregnant. US showed no amniotic fluid and 1000 g weight fetus. Baby was delivered with skeletal abnormalities and enlarged kidneys. Biopsy of kidneys showed tubular abnormalities. What teratogen causes this?

Losartan.

13) Which drug shouldn't be used for hypertension in the pregnancy?

Lisinopril.

14) G2P1 female presents with elevation blood pressure reading and proteinuria at 20 weeks gestation. All of the following drugs can be given except?

Lisinopril.

15) Which of the following antihypertensive drugs is absolutely contraindicated during pregnancy?

- a. Hydralazine
- b. Enalapril
- c. Magnesium sulfate
- d. Methyldopa
- e. Labetalol

Answer: B

16) Which of the following antihypertensive drugs is absolutely contraindicated during pregnancy?

- a. Valsartan
- b. Methyldopa
- c. Hydralazine
- d. Magnesium sulfate
- e. Labetalol

Answer: A

17) A pregnant woman at 28 weeks gestation experience regular uterine contractions every 3 minutes, the cervix was closed and elongated. Concerns about preterm labor which of the following therapy is justified?

The mother should take dexamethasone for 2 days.

18) Which of the following can be administered to the mother near term to prevent respiratory distress syndrome in preterm infant?

- a. Zidovudine
- b. Valproic acid
- c. Phenobarbital
- d. Thiopental
- e. Dexamethasone

Answer: E

19) All the following drugs can be used as tocolytic in preterm labor except?

Diazepam.

20) Maternal infection with group B streptococcus is associated with invasive disease of the newborn, and with increased risk of pregnancy loss, premature delivery, and transmission of the bacteria to the infant during delivery. Which of the following is the drug of choice for patients allergic to penicillin?

- a. Ampicillin
- b. Cefazolin
- c. Vancomycin
- d. Ciprofloxacin
- e. Clindamycin

Answer: B

**21) You want to achieve cervical ripening in pregnant with 42-week gestational age?

Intracervical Dinoprostone.

22) Used for constipation in pregnancy:

Psyllium.

23) Used for GERD in pregnancy:

Mg and Al (Antacids).

24) Treatment of hyperthyroidism in pregnancy:

PTU and switch to Methimazole.

25) Treatment of pyelonephritis:

Ceftriaxone.

26) Wrong match:

PPI - increase Ca excretion.

27) Cervical ripening:

Dinoprostone.

Therapy of Certain Disorders During Pregnancy

1) pregnant woman complain of GERD can take all of the following except :

Sodium bicarbonate

2) antihypertensive drug can't be used in pregnant woman :

Lisinopril

3) anti seizure drug that properly safe in pregnancy:

Lamotrigine

4) which of the following drugs is a good choice to induce cervical ripening in labor induction ?

Dinoprostone intracervically

5. Treatment of choice in N+V in pregnant?

- a. Pyridoxine+ doxylamine,
- b. Ginger

Answer: A

6. VTE in pregnancy, first choice? LMWH

7. Which of the following changes in pregnancy lead to increase in drug concentration?

- a. weak acidic drug
- b. GFR increase
- c. Increase fat content
- d. Decrease albumin

Answer: A

8. Not used in pyelonephritis? Nitrofurantoin

9. Wrong about tocolytic?

- a. abnormal vaginal bleeding is C/I
- b. ritodrine hypoK in pregnant
- c. Can be used any time in 3rd trimester
- d. Nifedipine hypoTN

Answer: C

10. OCP first time, what to start with? Monophasic

11. Not to stop OCP immediately?

- a. Abdominal pain,
- b. Severe leg pain,
- c. Retinal
- d. B6 deficiency

Answer: D

12. Not severe Side effect?

- a. Amenorrhea
- b. Stroke

c. Hepatic mass

Answer: A

13. DMPA all indication except?

- a. Inadherent to drug
- b. Contraindication to estrogen
- c. Breast feeding after 6 months
- d. Osteoporosis

Answer: D

14. Break through bleeding what to do?

- a. stop and start non hormonal method,
- b. give proges with androgen activity...

15. Women smoking and migraine after ocp +.... what to do? alternative DMPA

16. Which of the following increase K+.....? Drospirenone

17. Methotrexate should be stopped for how long before getting pregnant? 3 months?? 6 or 9

18. True reason about abx C/I during pregnancy?

- a. tetracycline + teeth before or after 5 months? (after= right in slides),
- b. cotriamo with hemolytic anemia
- c. trimetho with folate defeiciency

answer: a or 3??

19- Chronic peptic ulcer, chronic menorrhagia, Hb at 8 g/dl and iron defeciency, best management
ferrous sulphate at 150 mg daily for 6 months

20- A precaution in the use of epoetin alpha

Should not increase Hb by more than 1 g/dl every 2 weeks

21- A woman delivered a small baby, preterm, with craniosynostosis. It later showed intellectual activity. What's most likely cause

mother smoking during pregnancy

22- A woman received thiopental before her cesarean section. What adverse effect is likely to be seen in her neonate

sedation +- apnea

epilepsy

Therapy of epilepsy

1) Inhibitor of carbamazepine metabolism?

Valproate

2) Patient on carbamazepine therapy for tonic clonic seizure but still had frequent attacks of seizure so valproic acid was added. Several weeks later the patient developed neurological symptoms of diplopia and ataxia. What is the most likely explanation?

Valproic acid decreased the metabolism of carbamazepine

[note: valproic acid and topiramate are inhibitors]

3) Antiepileptic with most cognitive impairment?

Topiramate

4) Which of the following drug pairs metabolize vitamin D and cause osteoporosis with prolonged use?

Carbamazepine and phenytoin

5) Patient was on carbamazepine therapy for epilepsy. The physician kept increasing the dose over a period of weeks and the patient developed ataxia and nystagmus. Drug serum level was high at that point. Which of the following is wrong?

The drug was monitored correctly

6) Elderly on phenytoin since 25 years controlling his epilepsy, started complaining of incoordination, improved on lowering dose, still complaining of unsteadiness, next?

Lower dose again and monitor seizures

7) Elderlies have hypoalbuminemia, decreased hepatic blood flow and renal clearance. Which one of the following antiepileptic drugs is the most appropriate if used for the correct type of seizure?

Lamotrigine

8) Elderly with epilepsy?

Lamotrigine

[note: lamotrigine is considered the medication of choice in elderly]

9) Young patient with tonic clonic and mixed seizure, what is the best thing to give? **

Carbamazepine

[note: carbamazepine is first-line in many seizure types: focal onset seizures, generalized tonic-clonic seizures, and mixed seizure types]

10) Patient was on carbamazepine treatment for epilepsy and developed cognitive side effects at therapeutic doses, so he was switched to phenytoin. Which of the following you should avoid to tell your patient about this dangerous drug?

Phenytoin has lower cognitive side effects compared to carbamazepine (mostly)

11) Was on phenytoin, developed strong skin reaction, switch to?

Valproate

12) Which one of the following drugs can cause idiosyncratic acute liver failure?

Valproic acid

13) Boy with myoclonic epilepsy. Drug of choice?

Valproic acid

[note: valproic acid is first-line therapy for generalized seizures, including myoclonic, atonic, and absence seizures]

14) 9-year-old with frequent blank staring, poor concentration ... learning difficulties, awareness lapses and eye blinking, best treatment? ****

Ethosuximide

[note: ethosuximide is the first-line treatment for absence seizures]

15) Uncontrolled, mixed-seizure epilepsy, phenytoin, VA and CMZ failed (resistant), next? **

Lamotrigine

16) What is a dose dependent adverse effect ASD?

Lamotrigine and diplopia

17) Anti-seizure drug with carbonic anhydrase inhibitor effect?

Topiramate

18) Generalized tonic clonic seizures with neuropathic pain? **

Gabapentin

19) Wrong combination of antiepileptic drug and its use?

Ethosuximide – absence seizures and neuropathic pain

20) Contraindicated in breastfeeding?

Zonisamide

[note: phenytoin, valproic acid, levetiracetam and zonisamide distribute to breast milk and cross the placenta]

21) Liver disease avoid?

Carbamazepine

22) Common side effect caused by ASD:

Impairment of cognition

23) Incorrect :

GI upset is a chronic side effect of ethosuximide

24) Incorrect:

Neonates require high dose of ASD

25) Isoniazid & phenytoin => increased toxicity

Epilepsy

1. Wrong about monitoring?

- a. Valproic acid - peak
- b. Vancomycin - trough and peak
- c. Lithium - 12 hours post dose
- d. Sirolimus – trough

Answer: A

2. Which of the following is an inhibitor?

- a. Topiramate
- b. Carbamazepine
- c. Lamotrigine
- d. Vigabartan

Answer: A

3. Wrong match about chronic side effects of AED?

- a. chronic GI distress with Ethosuximide,
- b. carbamazepine with osteoporosis
- c. zonisamide with kidney stones

Answer: A

4. Wrong about usage of AED?

- a. Ethosuximide with focal seizure and neuropathic pain,
- b. Val acid with migraine,
- c. Gabapentin with focal+neuropathic pain,
- d. val acid with bipolar,
- e. topiramate with migraine

Answer: A

5. Long case 19 year old patient with myoclonic seizure and on carba+phenytoin + val acid with side effects + not working,, what to add?

- a. Lamotrigine
- b. Clonazepam

Answer: A

6- Inhibitor of carbamazepine metabolism

Valproate

7- Uncontrolled, mixed-seizure epilepsy, phenytoin, VA and CMZ failed, next lamotrigine

8- Elderly on phenytoin since 25 years controlling his epilepsy, started complaining of incoordination, improved on lowering dose, still complaining of unsteadiness, next lower dose again and monitor seizures

9)Generalized tonic clonic:

Carbamazepine

10)Mismatch:

Zonisamide (kidney stones+ underweight)

11)Not a common side effect of ASD:

SIADH + Hyponatremia

12)Mismatch:

Phenytoin => absence seizure

13)Hepatotoxic metabolite:

Valporic acid

14)Idiosyncratic side effect of phenytoin:

Pseudolymphoma

15)One of the following considered probably effective rather than effective ASD:

Tiagabine

16)benzodiazepines cause drowsiness when interacted with

Ethanol

17)anti seizure drug that properly safe in pregnancy:

Lamotrigine

18-Antiseizure drug for neuropathic pain

- a) phenytoin
- b) Gabapentin
- c) Carbamazepine
- d) Zonisamide

Answer: B

19- Which of the following is true?

- a) Phenobarbital increases the concentration of phenytoin
- b) Hypoalbuminemia results in increased total plasma concentration of phenytoin
- c) Phenytoin decreases the metabolism of estrogen
- d) Isoniazid may increase the toxicity of phenytoin

Answer: D

20- Which of the following is a mismatch regarding the side effects of anti-seizure drugs?

- a) Concentration dependent – diplopia
- b) Concentration dependent – gingival hyperplasia
- c) Idiosyncratic – pseudolymphoma
- d) Chronic – cerebellar syndrome

Answer: B

21-Which of the following is not true?

- a) The serum concentration of anti-seizure drugs is the therapeutic endpoint we rely on
- b) Higher concentrations are needed to control focal dyscognitive seizures than to control tonic clonic seizures
- c) We should interpret the concentration of anti-seizure drugs in association with clinical response

d) All are true

Answer: A

22- All of the following drugs are enzyme inducers except:

- a) Carbamazepine
- b) Phenytoin
- c) Valproic acid
- d) Lamotrigine

Answer: C

23-Which of the following can be used as first-line in treating absence seizures?

- a) Carbamazepine
- b) Phenytoin
- c) Valproic acid
- d) Lamotrigine

Answer: C

24-Side effects that are common to almost all anti-seizure drugs include:

- a) Weight loss
- b) Thrombocytopenia
- c) GI upset
- d) Ataxia and diplopia

Answer: D

25- 9 year old with learning difficulties, awareness lapses and eye blinking, best treatment
Ethosuximide

26- Was on phenytoin, developed strong skin reaction, switch to
valproate

27- Pregnant at 6 weeks, all is avoided except
carbamazepine (mostly)

migraine

Therapy of migraine

1) Long question about migraine patient taking many drugs, what is inappropriate in management?

Add another drug

2) Triptans... what can you add?

Corticosteroids

3) Drug not preventive in the treatment of migraine?

Carbamazepine

4) Not a problematic drug interaction:

metoclopramide & triptan

5) Migraine prevention & for anxiety:

Topiramate

6) correct:

valproic acid can be used to treat migraine

7) Not recommended in mild migraine :

Acetaminophen

Migraine

1. Which class of medications is considered first-line for acute treatment of migraine attacks?

- a. Beta-blockers
- b. Nonsteroidal anti-inflammatory drugs (NSAIDs)
- c. Antiepileptic drugs
- d. Triptans

Answer: d

2. What is the recommended duration of triptan use for the treatment of acute migraine attacks?

- a. 1 day
- b. 3 days
- c. 5 days
- d. 7 days

Answer: b

3. Which of the following medications is commonly used for migraine prophylaxis?

- a. Sumatriptan
- b. Propranolol
- c. Naproxen
- d. Acetaminophen

Answer: b

4. What is the recommended duration of treatment with preventive medications for chronic migraine?

- a. 1-3 months
- b. 6-12 months
- c. 2-3 years
- d. Indefinitely

Answer: d

5. Which of the following medications is a calcitonin gene-related peptide (CGRP) receptor antagonist used for migraine prevention?

- a. Propranolol
- b. Topiramate
- c. Amitriptyline
- d. Erenumab

Answer: d

6. What is the recommended prophylactic treatment for patients with frequent or severe migraines?

- a. Topiramate
- b. Sumatriptan
- c. Ibuprofen
- d. Propranolol

Answer: a

7. Wrong about Metoclopramide in Migraine?

- a. used in Refractory migraine
- b. Increase absorption or sth about decrease loss of drugs
- c. used for N+V of migraine + drugs of migraine
- d. sth about use in combination to decrease Rebound headache?

Answer: D

8)Not true regarding Migraine treatment:

Use antiemetic every 12 hours

9)Not correct regarding medication overuse headache:

Metoclopramide used as drug to treat MOH

10)Not true about ergotamine:

used in combination with triptans in refractory migraine

11)21 yrs old girl with asthma, history of kidney stones and renal problem which of the following is most suitable prophylactic management for migraine:

Divalporate

12)Wrong regarding abortive treatment of migraine:

Acetaminophen

13)One of the following wrong regarding triptan treatment:

Naratriptan has the rapid onset of action

14)One of the following is not contraindication to use triptan:

Patients over 35 years old

15-Which of the following is not used in the treatment of mild migraine?

- a) Aspirin/cafeine
- b) Diclofenac
- c) Ibuprofen
- d) Another NSAID
- e) Acetaminophen

Answer: E

16-Which of the following is not a side effect of ergotamine?

- a) Hypotension
- b) Chest tightness
- c) Severe ischemia
- d) Nausea and vomiting
- e) Rebound headache

Answer: A

17-One of the following drugs has a long duration of action and is used for prevention of migraine:

- a) Sumatriptan
- b) Ergotamine
- c) Frovatriptan
- d) Metoclopramide

Answer: C

schizophrenia

Schizophrenia

1. Which neurotransmitter is believed to be primarily dysregulated in my schizophrenia?

- a. Serotonin
- b. GABA
- c. Dopamine
- d. Acetylcholine

Answer: c

2. What is the most common age of onset for schizophrenia?

- a. Childhood
- b. Adolescence
- c. Early adulthood
- d. Late adulthood

Answer: c

3. Which of the following is NOT a positive symptom of schizophrenia?

- a. Delusions
- b. Hallucinations
- c. Flat affect
- d. Disorganized speech

Answer: c

4. Which class of antipsychotic medications is known for its greater risk of extrapyramidal side effects?

- a. First-generation (typical) antipsychotics
- b. Second-generation (atypical) antipsychotics
- c. Benzodiazepines
- d. Mood stabilizers

Answer: a

5. What is the first-line treatment for acute psychotic episodes in schizophrenia?

- a. Cognitive-behavioral therapy (CBT)
- b. Antidepressants
- c. Antipsychotic medications
- d. Electroconvulsive therapy (ECT)

Answer: c

6. Which medication is commonly used to manage the extrapyramidal side effects of antipsychotics?

- a. Lithium
- b. Haloperidol
- c. Lorazepam
- d. Benztropine

Answer: d.

7. Which symptom domain of schizophrenia is associated with impaired cognitive function and negative symptoms?

- a. Positive symptoms
- b. Negative symptoms
- c. Cognitive symptoms
- d. Affective symptoms

Answer: c

8- Which of the following drugs can cause severe hypotension?

- a) Chlorpromazine
- b) Haloperidol
- c) Aripiprazole
- d) Olanzapine

Answer: A

9. Clozapine, an atypical antipsychotic, is primarily used in which situation?

- a. First-line treatment for acute psychotic episodes
- b. Treatment-resistant schizophrenia
- c. Bipolar disorder
- d. Generalized anxiety disorder

Answer: b

10. Which therapy approach focuses on helping individuals with schizophrenia manage their symptoms and improve functioning in daily life?

- a. Cognitive-behavioral therapy (CBT)
- b. Psychodynamic therapy
- c. Electroconvulsive therapy (ECT)
- d. Transcranial magnetic stimulation (TMS)

Answer: a

11. What are the key features of schizophrenia?

- a) Disorganized and bizarre thoughts
- b) Delusions and hallucinations
- c) Inappropriate affect and impaired psychosocial functioning
- d) All of the above

Answer:d

12. Which neurotransmitter dysfunctions are involved in schizophrenia?

- a) Dopamine
- b) Serotonin
- c) Glutamate
- d) All of the above

answer: d

13. What is the recommended approach for selecting an antipsychotic drug for a patient with schizophrenia?

- a) Focus on the beneficial effects
- b) Consider the adverse effect profiles
- c) Use combination regimens for all patients
- d) Use monotherapies with high risk of adverse effects

Answer: b

14. What is the role of psychosocial rehabilitation programs in the treatment of schizophrenia?

- a) They are not effective and should be avoided
- b) They should be used as the sole treatment option
- c) They should be used in combination with antipsychotic treatment
- d) They are only necessary during the initial psychotic episode

Answer:c

15. What is the recommended duration of maintenance antipsychotic treatment for most patients with schizophrenia?

- a) 1-2 years
- b) 5-10 years
- c) Lifelong treatment
- d) No maintenance treatment is needed

Answer: c

16. Patients with schizophrenia who continue to abuse alcohol or drugs usually have:

- a) A better response to medications
- b) A poor response to medications and a poor prognosis
- c) Reduced risk of relapse
- d) No impact on their treatment outcomes

Answer: b

17. Which of the following medical conditions can cause psychosis?

- a) HIV (AIDS)
- b) Alzheimer's disease
- c) Parkinson's disease
- d) All of the above

answer: d

18. What are the desired outcomes of therapy for schizophrenia?

- a) Avoiding adverse effects
- b) Increasing adaptive functioning
- c) Preventing relapse
- d) All of the above

answer: d

19. Which antipsychotic medications belong to the first-generation antipsychotics (FGAs)?

- a) Chlorpromazine
- b) Haloperidol
- c) Thiothixine
- d) All of the above

answer: d

20. How do second-generation antipsychotics (SGAs) differ from FGAs in terms of their mechanism of action?

- a) SGAs block dopaminergic neurotransmission
- b) SGAs block D2 dopamine receptors as well as 5-HT_{2A} serotonin receptors
- c) SGAs have a higher risk of neurologic adverse effects
- d) SGAs are not effective in treating schizophrenia

Answer: d

21. What is the major advantage of SGAs over FGAs?

- a) Lower risk of neurologic adverse effects, particularly motor effects

- b) Higher efficacy in treating positive symptoms
- c) Lower risk of metabolic adverse effects
- d) Faster onset of action

Answer: a

22. What are the goals during the initial treatment of an acute psychotic episode in patients with schizophrenia?

- a) Reduction of symptoms and normalization of sleep and eating patterns
- b) Complete elimination of symptoms

Answer: a

23-Case describing schizophrenia, after treatment begins patient develops severe akathisia. drug most likely to have caused this?

- a) Clozapine
- b) Haloperidol
- c) Risperidone

Answer: B

24-Which of the following substances does not cause psychosis?

- a) Cannabis
- b) Cocaine
- c) Amphetamine
- d) LSD
- e) Nicotine

Answer: E

25- All of the following are side effects of clozapine except:

- a) Weight loss
- b) Sedation
- c) Seizures
- d) Agranulocytosis

Answer: A

depression

Depression

1. Which class of medications is considered first-line treatment for major depression?

- a. Selective serotonin reuptake inhibitors (SSRIs)
- b. Benzodiazepines
- c. Tricyclic antidepressants (TCAs)
- d. Monoamine oxidase inhibitors (MAOIs)

Answer: a

2. What is the recommended duration of antidepressant treatment for a first episode of major depression?

- a. 2 weeks
- b. 4 weeks
- c. 6 months
- d. 1 year

Answer: c

3)serotonin syndrome caused by interact SSRI with :

Linezolid

4-All of the following drugs can cause depression except

- a) Methyldopa
- b) Isotretinoin
- c) Triptans
- d) Carbamazepine
- e) Steroids

Answer: D

5-Which of the following antidepressants is used for smoking cessation?

- a) Venlafaxine
- b) Trazodone
- c) Bupropion
- d) Mirtazapine
- e) Phenelzine

Answer: C

6-Wrong about SSRI:

- a) SSRIs are usually the antidepressants of first-choice in the elderly.
- b) adverse effects appear after 3 weeks

Answer: B

7. What is the term for the loss of interest, motivation, and emotional responsiveness often seen in schizophrenia?

- a. Apathy
- b. Agitation
- c. Mania
- d. Euphoria

Answer: a

8- A patient with depression who takes MAO inhibitor. Which food he should not take - fermented cheese

**antimicrobial
selection and
prophylaxis**

RATIONAL ANTIMICROBIAL SELECTION & ANTIMICROBIAL PROPHYLAXIS

- True about rational drug prescription is?
Specimen for culture should be taken at the time of Empirical drug
- Wrong about therapy that avoids drug interactions (in a child with UTI)?
Should not start antibiotics before culture
- Which of the following antibiotics should have adjustment of dose in patients having BOTH renal and hepatic disease?
 - a. Cefotaxime
 - b. Penicillin G
 - c. Gentamicin
 - d. Clindamycin
 - e. Erythromycin

Answer: **A**
- Which of the following medications needs to be adjusted in both renal and hepatic failure rather than only hepatic failure?
Piperacillin
- All of the following need to be dose adjusted in hepatic disease except?
Gentamicin
- Which of the following antibiotic classes is NOT matched with a correct agent that enhances its toxicity?
 - a. Aminoglycosides – vecuronium
 - b. Tetracyclines – sucralfate
 - c. Metronidazole – furosemide
 - d. Vancomycin – radiocontrast media
 - e. Macrolides – digoxin

Answer: **C**
- Wrong interaction?
 - a. Quinolones with antiarrhythmic cause QT prolongation
 - b. Rifampin decrease cyclosporine
 - c. Macrolide decrease gentamicin
 - d. Isoniazid increase carbamazepine

Answer: **C**
- Doesn't cause photosensitivity?
 - a. Tetracycline
 - b. Gentamicin
 - c. Sulfamethoxazole
 - d. Trimethoprim

Answer: **B**
- Which of the following antibiotics is NOT implicated in causing diarrhea and colitis secondary to clostridium difficile superinfection?
 - a. Amikacin
 - b. Clindamycin
 - c. Levofloxacin
 - d. Imipenem
 - e. Minocycline

Answer: **A**
- Not known cause of C. difficile? *
 - a. Metronidazole
 - b. Tetracycline
 - c. Fluoroquinolone
 - d. Amoxicillin
 - e. Imipenem

Answer: **A**

Should be adjusted in severe liver disease:
clindamycin, erythromycin, metronidazole, rifampin

Should be adjusted in both liver and renal dysfunction:
nafcillin, sulfamethoxazole, **cefotaxime, piperacillin**

- Least cause of superinfection is?
Gentamycin
- Which of the following side effects is mismatched?
Clindamycin and QT prolongation
- Empiric antibiotic therapy for an infection is based on all of the following, EXCEPT? *
 - a. Site of infection
 - b. Results of rapid identification tests
 - c. Local most offending pathogen
 - d. Physician opinion
 - e. Local antibiogram
 Answer: **D**
- Which of the following is NOT a cause of failure of antimicrobial therapy?
 - a. Immunosuppression
 - b. Concomitant drug that inhibits antibiotic metabolism
 - c. Presence of foreign bodies at site of infection
 - d. Cystic fibrosis
 - e. Short bowel syndrome
 Answer: **B**
- Best prophylactic for “elective” Colorectal surgery?
Oral neomycin and erythromycin
- What is the appropriate surgical prophylaxis for a perforated appendix?
Cefazolin and metronidazole
- Wrong antimicrobial prophylaxis?
Appendectomy Cefazolin

Note: cefazolin alone is NOT enough metronidazole must be ADDED

- Wrong match about prophylaxis?
 - a. Craniotomy - cefazolin
 - b. C/S – cefotetan
 - c. Appendectomy – cefotetan and metronidazole
 Answer: **B**
- Wrong match about prophylaxis ?
Rheumatic fever with Cephalosporine

Note: we use benzathine penicillin for rheumatic fever prophylaxis

Enhance **aminoglycosides** toxicity:

- a. Neuromuscular blocking agents
- b. Nephro- and Oto- toxins → amphotericin, cisplatin, cyclosporine, **furosemide**, NSAIDs, radiocontrast media, **vancomycin**

Enhance **tetracycline** toxicity:

- a. Antacids, iron, calcium, **sucralfate**
- b. Digoxin

Enhance **metronidazole** toxicity:

Drugs containing ethanol

Enhance **macrolides/azalides** toxicity:

- a. Digoxin
- b. Theophylline

Enhance **quinolones** toxicity:

- a. Class 1a and 3 antiarrhythmics
Increase Q-T interval
- b. Multivalent cations (antacids, iron, sucralfate, zinc, vitamins, dairy products), citric acid, didanosine

Rifampin **increases metabolism** of azoles, **cyclosporine**, methadone, propranolol, protease inhibitors, oral contraceptives, tacrolimus, warfarin...

Isoniazid **decreases metabolism** of carbamazepine, phenytoin

Photosensitivity:

Azithromycin, quinolones, **tetracyclines**, pyrazinamide, **sulfamethoxazole**, **trimethoprim**

Clostridium difficile superinfection:

- **Penicillin & cephalosporins**
- **Carbapenems (imipenem)**
- Monobactams (aztreonam)
- Lipopeptides (daptomycin)
- **Tetracyclines**
- Chloramphenicol
- **Clindamycin**
- **Fluoroquinolones**

QTc prolongation:

- Fluoroquinolones
- Macrolides/Azalide

Antimicrobial Selection and Prophylaxis

1-all of the following about empirical antimicrobial selection is true except ?

It depends on the physician experience

2-all of the following antibiotics need to be adjusted in liver disease except ?

Gentamycin

3-which of the antibiotic-side effect is mismatched ?

Amoxicillin-liver toxicity

4-what is the appropriate surgical prophylaxis for a perforated appendix ?

Cefazolin + metronidazole

5- which of the following side effects is mismatched ?

Clindamycin and QT prolongation

6. What to AVOID in liver failure?

- a. Valacid
- b. Erythromycin
- c. Morphine
- d. Metronidazole

Answer: C

7. don't cause photosensitivity?

- a. Tetracycline
- b. Gentamicin
- c. Sulfamethoxazole
- d. Trimethoprim

Answer: B

8. Not known cause of C.diff?

- a. Metronidazole
- b. Tetra
- c. Fluroquo
- d. Amoxicillin
- e. Imipenem

Answer: A

9. Cause HTN crise when given with cheese or tyramine?

- a. Linezolid
- b. Tigecycline

Answer: A

10. Intrinsic Resistance to beta lactams? Mycoplasma

11. Which of the following medications needs to be adjusted in both renal and hepatic failure rather than only hepatic failure? Piperacillin

12. Wrong match about prophylaxis?

- a. Craniotomy cefzolin,
- b. C/S cefotetan,
- c. Appendectomy Cefotetan+ metronidazole

Answer: B

13. Wrong match about prophylaxis ? Rheumatic fever with Cephalosporine

14. What is used in N.mening prophylaxis in pregnancy? Ceftri

15. C/I in pregnant lady with constipation? Castor Oil

16. Wrong match about mening Tx duration? E- Cloi for 2 months,

17. you choose 2 antipseudomonal antibiotics in case of:

There is structural lung disease

18. An antibiotic that you can give with or without inflammation:

Levofloxacin

19. brain abscess, you treat by:

Vancomycin plus ceftriaxone plus metronidazole.

20. Not used in the treatment of cryptococcus neoformans:

Terbinafine

21. serotonin syndrome is caused by:

Linezolid

22. Long QT interval is caused by

Macrolides

23. Wrong antimicrobial prophylaxis :

Appendectomycefazoline

24. neonatal chlamydia meningitis:

Azithromycin

25. Wrong about CKD:

Hepatic clearance is spared

26. Which of the following drug you give in G6PD:

Amikacin

27- Wrong about therapy that avoids drug interactions (in a child with UTI) -

should not start antibiotics before culture

28- What is the most serious side effect of NSAIDs?

- a) Depression
- b) Renal dysfunction
- c) Peptic ulcer
- d) Hypertension

Answer: B

29-Which of the following does not require IV antibiotic treatment?

- a) Meningitis
- b) Osteomyelitis
- c) Cystitis
- d) Severe pneumonia

Answer: C

30-Doesn't need to be adjusted in liver failure:

- a) Rifampin
- b) Metronidazole
- c) Gentamicin
- d) Clindamycin
- e) Erythromycin

Answer: C

31-All of the following drugs are nephrotoxic except:

- a) Amphotericin
- b) Amikacin
- c) Radiocontrast
- d) NSAID
- e) Penicillin

Answer: E

32-All of the following are considered rational reasons for combination antimicrobial therapy, except:

- a) To provide broad-spectrum empiric therapy in seriously ill patients.
- b) To treat polymicrobial infections
- c) To decrease the emergence of resistant strains
- d) To decrease dose-related toxicity
- e) To cover all possible organisms

Answer: E

33- Which of the following can be used for the empiric coverage of methicillin-sensitive staph aureus?

- a) Vancomycin
- b) Piperacillin-tazobactam
- c) Linezolid
- d) Cefiderocol

Answer: B

34- Which of the following is not a side effect of TMP-SMX?

- a) Kidney stones
- b) Bone marrow suppression
- c) Methemoglobinemia

d) Hypokalemia

Answer: D

35- Which of the following is a mismatch between the operation and the proper antibiotic used for prophylaxis?

- a) Cholecystectomy - Cefazolin
- b) Perforated bowel – cefazolin and metronidazole
- c) Appendectomy – Cefazolin
- d) Elective colectomy – erythromycin and neomycin

Answer: C

36- Which of the following is a mismatch between organisms and antimicrobial prophylaxis?

- a) Penicillin – Pneumococcus
- b) Rifampin – Meningococcus
- c) TMP-SMX – pneumocystis jiroveci
- d) Penicillin – Toxoplasma

Answer: D

37- Which of the following is true regarding antimicrobials in pregnancy?

- a) Penicillin concentration in maternal serum is decreased during pregnancy
- b) All antimicrobials are teratogenic
- c) The clearance of aminoglycosides increases during pregnancy
- d) None of the above

Answer: A

38-All of the following statements are true except:

- a) Empirical antifungal therapy should be initiated after 4 to 7 days of persistent febrile patients even after taking broad antibiotic therapy.
- b) Antifungal treatment of meningitis is for 5 days
- c) Empirical therapy in neutropenic patients should cover both candida and Aspergillus
- d) None of the above is true

Answer: B

39-Best prophylactic for' elective' Colorectal surgery: Oral neomycin and erythromycin

40-Least cause of superior infection is : GENTAMYCIN

41- A patient with history of allergic rhinitis and eczema recently developed astham. Which is true
Aspirin relieves symptoms and nasal polyps

42- A patient taking sustained-release niacin. They complain of flushes and itch. Best management
use Aspirin before dose

43- A 6 year old, 15kg, presented to ER with vomiting, 10 bowel motions/day. He has tachycardia, and capillary filling at 3 seconds. Next step

Give 300 ml normal saline in 30 minutes.

44- A 1 year old presented with abdominal pain, vomiting, diarrhea. She has mild dehydration. Feces show Entamoeba histolytica. Drug that must not be used -
Loperamide.

pneumonia

THERAPY OF PNEUMONIA

- CAP outpatient with no comorbidity what to use?
 - a. Amoxiclav
 - b. Amoxiclav and doxycyclineAnswer: **A**
- Patient with previous history of asthma presents with fever and chest pain. His BP was 156/90, pulse was normal and his temperature was 38.7. A diagnosis of pneumonia was made. What is the management?
Amoxicillin-clavulanate and azithromycin
- 75-year-old, with a picture of lobar pneumonia, RR 38/minute, BP 107/70 mmHg, BUN 12, and alert and oriented, best management?
Admit to medical floor and start levofloxacin
- Patient admitted to the hospital as a case of pneumonia with patchy interstitial infiltrate on X rays, you choose?
Levofloxacin
- MRSA what to use?
Vancomycin
- Patient diagnosed with pneumonia from P aeruginosa, treatment?
Meropenem and ciprofloxacin
- You choose 2 antipseudomonal antibiotics in case of?
There is structural lung disease
- A boy was on a ventilator for treatment of pneumonia and had aggressive antibiotic therapy and after many times he developed VAP and cultures grow MRSA. What is the management?
Vancomycin
- Neonatal Pneumonia, wrong?
Answers were not provided
- What is the management of neonatal pneumonia by chlamydia trachomatis?
Azithromycin
- Pneumonia caused by penicillin-resistant strep. pneumonia, you choose?
~~Ceftriaxone~~ **vancomycin**
- Intrinsic Resistance to beta lactams?
Mycoplasma
- Patient had hospital acquired pneumonia and his vital signs were deranged then he later developed meningitis. What is the management?
Cefepime and vancomycin (not sure)
- 2 long cases about old patients with comorbidities one with COVID and other with positive urine pneumococcal, what to choose?
Answers were not provided

Pneumonia

1. Which of the following antibiotics is considered a first-line treatment for community acquired pneumonia in an otherwise healthy adult?

- a. Ampicillin
- b. Ceftriaxone
- c. Levofloxacin
- d. Vancomycin

Answer: c (assuming pt is being treated as an in patient)

2. What is the recommended duration of antibiotic treatment for uncomplicated community-acquired pneumonia in immunocompetent adults?

- a. 3-5 days
- b. 7-10 days
- c. 14-21 days
- d. 30 days

Answer: b

3. Which of the following is an appropriate empirical antibiotic choice for a hospitalized patient with severe pneumonia and risk factors for multidrug-resistant pathogens?

- a. Amoxicillin-clavulanate
- b. Ceftriaxone
- c. Vancomycin
- d. Piperacillin-tazobactam

Answer: d

4. Which of the following is not a risk factor for drug-resistant pathogens in pneumonia?

- a. Age over 65 years
- b. Recent hospitalization
- c. Chronic obstructive pulmonary disease (COPD)
- d. Smoking history

Answer: c

5. Which antibiotic is considered the first-line treatment for community-acquired pneumonia in a previously healthy adult?

- a. Azithromycin
- b. Ceftriaxone
- c. Vancomycin
- d. Levofloxacin

Answer: a (treated as outpatient)

6. Pneumonia caused by penicillin-resistant strep.pneumonia, you choose: Ceftriaxone

7. patient admitted to the hospital as a case of pneumonia with patchy interstitial infiltrate on X rays, you choose:

Levofloxacin ???

8- Patient diagnosed with pneumonia from P aerogenosa, treatment
meropenem + ciprofloxacin

9- A patient with refractory pneumonia and an upper lobe nodule, treatment

IV voriconazole

10- A patient with post-herpetic neuralgia on gabapentin, acetaminophen, tried TCA, sertraline and NSAIDs with no benefit, next add oxycodone PRN

11- Vitamin that prevents izoniazid neurotoxicity
B6

12-Treatment of choice for Acinetobacter pneumonia:

- a) Ampicillin
- b) Tigecyclin
- c) Colistin
- d) Ceftriaxone

Answer: A

13- Which of the following combinations cannot be used to cover pseudomonas in inpatient settings of community acquired pneumonia?

- a) Vancomycin and Ciprofloxacin
- b) Imipenem and Levofloxacin
- c) Piperacillin-tazobactam and Ciprofloxacin
- d) Meropenem and Levofloxacin

Answer: A

14- All of the following combinations can be used for treatment of ventilator associated pneumonia except:

- a) Ceftazidime and Levofloxacin
- b) Imipenem and Levofloxacin
- c) Piperacillin-tazobactam and Gentamicin
- d) Clarithromycin and nafcillin

Answer: D

15- Which of the following can be started as a monotherapy in low-risk pneumonia?

- a) Levofloxacin
- b) Moxifloxacin or Gemifloxacin
- c) Ceftriaxone
- d) Azithromycin

Answer: D

16- A 72 year old man with hypertension was diagnosed with a neurologic problem and complained of multiple episodes of choking with saliva. After several days, he developed shortness of breath and was found to have pneumonia, which of the following is the best regimen to use?

- a) Amoxicillin only
- b) Amoxicillin + azithromycin+ metronidazole
- c) Amoxicillin + Azithromycin
- d) Azithromycin only

Answer: B

17- 75 years, with a picture of lobar pneumonia, RR 38/minute, BP 107/70 mmHg, BUN 12, and alert and oriented, best management admit to medical floor and start levofloxacin

meningitis

THERAPY OF MENINGITIS

- 65-year-old patient with headache, fever, nuchal rigidity, CSF hazy with no culture yet. best start on?
Vancomycin, ceftriaxone and ampicillin
- An antibiotic that you can give with or without inflammation?
Levofloxacin
- Case of meningitis caused by penicillin resistant strep. pneumoniae, you choose?
Vancomycin plus ceftriaxone
- Patient had meningitis and culture revealed penicillin resistant streptococcus pneumonia. what is the most appropriate management?
Vancomycin and cefotaxime
- Which of the following durations of therapy is wrong?
Neisseria meningitis - 21 days
- Wrong match about meningitis treatment duration?
E. coli - 2 months
- Brain abscess, you treat by?
Vancomycin plus ceftriaxone plus metronidazole
- A patient with 1 year history of chronic sinusitis. Presents with altered mental status and fever. Exam revealed tenderness and discharge from the forehead at the frontal sinus. CT scan revealed a ring enhancing lesion. A diagnosis of brain abscess is made. What is the management?
Vancomycin, cefotaxime and metronidazole
- What is the management of cryptococcal meningitis?
Amphotericin B and flucytosine
- Not used in the treatment of cryptococcus neoformans?
Terbinafine
- A child with acute bacterial meningitis with gram negative bacilli, wrong about therapy? *
No need for rifampicin in adult contacts
- What is used in N. meningitidis prophylaxis in pregnancy?
Ceftriaxone

Meningitis

1. Case of meningitis caused by penicillin resistant strep.pneumoniae, you choose:

Vancomycin plus ceftriaxone

2- A child with acute Bacterial meningitis with gram negative diplococci, wrong about therapy

no need for rifampicin in adult contacts

3- A neonate with acute bacterial meningitis with gram negative bacilli, wrong about therapy

no need to give prophylaxis to contacts (mostly)

4- A 65-year-old woman who presented with fever and altered mental status was diagnosed with a brain abscess. Which of the following is most suitable to use for treatment?

- a) Vancomycin + cefepime + metronidazole
- b) Vancomycin + cefepime
- c) cefepime + metronidazole
- d) Meropenem only

Answer: A

5- Which of the following is used as empirical therapy for meningitis in neonates?

- a) Vancomycin and ceftriaxone
- b) Vancomycin and ampicillin
- c) cefepime + metronidazole
- d) Ampicillin and cefotaxime

Answer: D

6- A 43-year-old woman who works as a nurse was exposed to a patient with meningitis. Then, she started showing signs and symptoms of meningitis. Which of the following can be used as empirical therapy in this case?

- a) Vancomycin and ceftriaxone
- b) Vancomycin and ampicillin
- c) cefepime + metronidazole
- d) Ampicillin and cefotaxime

Answer: A

7- Which of the following can be used as empirical therapy in a 55-year-old man diagnosed with meningitis?

- a) Vancomycin and ceftriaxone
- b) Vancomycin and ampicillin
- c) Vancomycin, ampicillin, and ceftriaxone
- d) Vancomycin and cefotaxime

Answer: C

8-Which of the following is a mismatch between organisms causing meningitis and the duration of treatment?

- a) Group B streptococcus: 7-10 days
- b) Staph. Epidermidis: 14-21 days
- c) Listeria: 14-21 days
- d) Hemophilus influenza: 7-10 days

Answer: A

9-Which of the following statements is true regarding brain abscesses?

- a) The duration of treatment is the same for all patients
- b) A multiloculated abscess takes less time to resolve
- c) The treatment is usually 4-8 weeks
- d) Brain abscesses are usually monomicrobial

Answer: C

10-Which of the following is true regarding cryptococcus CNS infections?

- a) It usually affects both immunocompetent and immunocompromised patients.
- b) Amphotericin B is no longer the drug of choice
- c) The use of corticosteroid therapy can be detrimental in Cryptococcus meningitis
- d) Fluconazole is fungicidal and thus can be used alone

Answer: C

11- 65 with headache, fever, nuchal rigidity, CSF hazey with no culture yet. Best start on vancomycin + cephtriaxone + ampicillin