

NEERAJ'S: STRATEGY FOR USMLE STEP-3 CCS

The step-3 examination:

It is two days examination. First day, the test consists of 336 multiple-choice questions (MCQs) given in seven blocks of 48 MCQs each. You are provided with one hour to deal with every block.

Second day, 144 MCQs will be given in the first four hours (Four blocks of 36 questions). Over the next 4 hours you will be given nine Computer-based Case Simulations (CCS) cases.

Total Multiple choice questions (both days included) = 480

There is one-hour of break time every day, which can be split up and used in-between blocks as you like.

Step 3 is mainly an assessment of your clinical decision-making ability and medical management skills.

How to prepare for CCS:

1. USMLE CD: To know about the structure of the exam and a simulator with 5 patients for you to practice. One of the most efficient ways to prepare for the CCS is to practice the cases in the simulator and know how to use the program. The CCS simulator has several keys and features, and you need to know them very well.

FAQ:

My patient did not improve: Did I fail?

Nops! It is the protocol which counts. If you followed all important steps required in the management of that patient, it doesn't affect your score. Keep in your mind that the outcome of the patient is not always relevant to your score. You may find during the CSS that some patients doesn't improve or can even complicate while standard management is being used.

My case was finished before time: Did I fail?

It has nothing to do with your performance. It is possible that you may require to follow only a few steps and case ends within few minutes. Your

score will depend on you knowing what to order and in the which sequence. The timing of order is obviously more important.

How the CCS scored:

The software considers:

1. The orders you write to make diagnosis and exclude DDx including all labs and imaging
2. The points you write to treat the conditions
3. How and what you monitor
4. How you change location in appropriate setting
5. Is the timing of all orders correct? Like managing an ER patient within shortest duration to save his life?
6. Sequencing
7. Did you order something which was harmful to the patient or contraindicated in management?

All above mentioned orders are compared with an ideal approach and scoring is done.

PROTOCOL TO DEAL WITH CCS CASE:

The CCS:

You will have approximately 25 minutes to complete all expected steps in management, and for that an organized approach is recommended.

The following is an outline how to perform during the exam:

1. Read the case presentation: Make mental check list of DDx and appropriate physical Examination
2. Order all emergent procedures if required (ABCD's is the top priority)
3. Perform PE :
 - Confine yourself to most specific and targeted PE in emergency room (2-3 systems)
 - Perform complete PE in other patients or once the emergency/ABCD's already dealt.
 - Always perform a general, pulmonary, cardiovascular, abdominal, and extremities examination
 - Select any other system as suggested by the presentation
4. Write Orders
 - Laboratory/radiological tests
 - Medications
 - Procedures (diagnostic and therapeutic)
 - Consultations of specialists.
5. Change Patient's Location if required
6. Continuous Management (screen for risk factors and complications)
7. End Case
 - a. If patient improves, discharge or change to an appropriate location
 - b. Make an appointment and continuously follow the patient
 - c. Order appropriate counseling

Step-1:

Write down the age, sex, chief complaint, and allergies of the patient on the writing sheet provided at the exam at prometric center

Write down following information:

1. Setting: ER?
 2. Age, Race (African American?) & Sex
 3. Abnormal vitals
 4. Diabetic or not?
 5. Allergies, Drugs, Alcohol, Tobacco
 6. Important presenting complaints: Including chief complaint and associated complaints
- Age: >50: Colonoscopy, DRE (Male), Mammography (>40), Vaccines, FOBT
Female: Pap, Mammo, B-hcg, Chlamydia/GC (write down whatever applicable and need to be elaborated during the case)
You need to mention all these age/sex specific screening on 5 minute screen.
 - Abnormal vitals
 1. Low BP-Insert IV access and start IV NSS →Cardiac Monitor + 12 lead EKG
 2. Increased RR with Dyspnea-Pulse oximetry with Oxygen inhalation.
 - Is he/she Diabetic? Don't forget to Check HB A1c and regular accucheck. Mention drug compliance, Diabetic foot care, Regular accucheck, Diabetic diet, Ophtalmology consult for funduscopy.
 - Note down the allergies: Never write those drugs.
 - Associated complaints:
 1. Vomiting: IV Pheneragan
 2. Constipation: Docusate
 3. Diarrhea: Loperamide
 4. Severe somatic pain: Morphine (Except CBD stone: Mepiridine)
 5. Severe body pain: Naprexone/Ketorolac/Indomethacin
 6. Chest pain: Aspirin + Sublingual NG

Step-2

See the Location! Gives clue of diagnosis: Is it an emergency?
Are Vitals unstable? Office presentation with unstable vitals → Send to ER

Emergency Protocol:

Pulse Oximetry
Oxygen inhalation
IV access (Bleeding -2 large bore needles)
IV NSS
Cardiac (Cardio-respiratory) monitoring
Continuous BP monitoring
12 lead EKG
Finger stick glucose
(Write whatever applicable)

Pulse Oximetry

IV access

- Above two options might be required in many other settings-ask if it is required.
- Pulse oximetry may be needed almost in 30-40% cases. Write it freely.)

PE: Only General + Limited system (Maximum Two systems): It's an emergency-don't waste your time buddy! → Once the patients vitals are stable → Perform the remaining PE.

Otherwise you may perform relevant PE in office setting → Complete PE !

Laboratory tests: BOUPI Mnemonic

- B: Blood: CBC, BMP, LFT, Lipid profile, PT/PTT, Culture(In every fever/Infection)
- O: Other tests: EKG,PEFR (In every asthma /COPD case),Pulse oximetry
- U: Urine: UA, Culture, Toxicology(LOC, Poisoning, Acute confusion, MVA)
- P: Pregnancy
- I: Imaging : X-Ray, USG,CT,MR
- Always prefer screening, time and cost effective and noninvasive tests first → Confirmatory test can be ordered later e. g Pulse oximetry first followed by ABG
- Any invasive test → Take appropriate consult.
- Tx only after confirmatory test is done
- Choice of tests: Noninvasive screening tests are always preferred first → Think before if you order an invasive test? Is it actually needed

Usual Labs and simple tips:

- Universally written:
 1. CBC,
 2. BMP
 3. Urine routine
- PT/PTT:
 1. Always write when H/o any bleeding
 2. Or you are going to insert a needle e.g CSF aspiration, Thracocentesis
 3. pre-op patient
- LFT: Whenever a pain abdomen is there or h/o jaundice
- TSH: Suspecting Thyroid problem, Fatigue or dementia, Muscular pain, Raised LFT's
- Lipid Profile: Nephrotic syndrome, DM, CAD,
- Cardiac enzymes: Chest apin, Injury chest
- ABG: Severe dyspnea, Altered O2 on pulse oximetry, Acid base imbalance
- Toxicology screen-Urine: Sudden confusion, Palpitation, LOC
- ESR: New back pain, SLE, Sarcodosis, TB
- If there is h/o severe bleed: after measuring PT/PTT order Blood grouping and cross matching
- Transfusion when Hb <8 (if bleeding continue) or <10 (without active bleed): Use 2-3 units
- If PT > 17 GIVE Fresh frozen plasma
- When giving FFT/Blood transfusion stop NSS
- If suspecting Infections (sepsis): cultures of Blood, Urine, Sputum or CSF, as appropriate.
- Acute abdomen: order amylase, lipase, b HCG & acute abdominal X ray series

Treatment:

In proper setting → Change the location as per need → Floor/ICU

Don't forget to refer allergies before you write Tx

Does it require any tube: NG Tube or Foley's catheter?

- H/o Bleed (Fresh blood thru mouth or per rectum –to r/o Upper GI bleed) : NG Tube
- No urine for many hours: Foley's catheter (R/o obstruction)

Admit to floor or ICU: Use Mnemonic "ADMIT CO"

Activity: As tolerated/Bed rest Complete (or with bath room privileges)

Diet: NPO/Diabetic /Renal/Low cholesterol or low salt diet

Medications: To discontinue (Metformin etc) or Continue

Input/Output, IV Fluid

Temperatute. BP. RR –Vitals

Compression: Pneumatic Stocking
Omeprazole : to protect gastric mucosa/Ranitidine IV

Do Interval/follow-up history: Very essential to know how patient is improving?

Move the patient as per the need:

When patient is improving follow: ER→ICU →Ward →Office/Home

When the patient deteriorating: Office→ Ward/ER →ICU

ER:

- Aggressive Treatment
- Remember First stabilize, then full physical, and then admit
- Do not send patient to home immediately-admit him(can be for one day only)
- Breathing difficulty: Pulse oximetry, order Oxygen, albuterol PRN
- Unresponsive state: Check finger stick glucose stat, naloxone given if opiates are suspected (Pupils), and thiamine added to IV fluids if alcoholic.
- **Overdose/poisoning: Admitted to the ICU** for closer monitoring and suicide precautions. Don't forget to get a Psychiatry consult, Suicidal contract and precautions.
- In the ER setting, first do a brief physical exam (2 min).Once the patient is stabilized and lab results reviewed, do a full physical exam. Then shift the patient to the ICU or ward.
- Then write orders and labs. Do not write entire panel like BMP-Be specific for test in ER(To save time)
- Acute abdomen and most surgical emergencies need frequent and multiple interval H&P.

Office:

- Counseling is a major part of outpatient office visits. Pay particular attention to counseling in normal/ routine patient visits. Important counseling topics include smoking, alcohol, drugs, safe sex practices, exercise, weight reduction, diet, and self-breast exam.
- Patients with Hypertension and diabetes should have appropriate diets ordered (2 gm salt restricted or 1800 ADA diet)
- For abnormal LFTs order a hepatitis profile/panel if appropriate. USMLE CCS exam assesses the appropriateness of medical orders.
- Order tests to diagnose H. pylori if patient has GERD. The H. pylori antibody should be ordered if the patient has never been diagnosed before and the Urease breath test if checking for elimination/ recurrence.

In patient:

- Inpatient hospital admissions need a physical exam everyday and appropriate lab and medical orders.

Step-3

Counseling at 5 minutes screen: RATED SEX

1. Reassurance
2. Alcohol-No
3. Tobacco-No
4. Exercise regularly
5. Drug compliance/No recreational drugs
6. Seat belt
7. Educate patient/family
8. X factor is -Sex (safety)
9. Mention all screenings and vaccines-if applicable as per sex & age

Pediatric patient: Modified RATED SEX:

1. Reassurance
2. Safety plan/Helmets when Bicycle riding
3. Educate patient/family
4. vaccines

DTaP - 2 months, 4 months, 6 months, between 15 and 18 months, between 4 and 6 years.

IPV - 2 months, 4 months, between 6 and 18 months, between 4 and 6 years.

Hepatitis B - Birth, 2 months, 4 months.

H. influenza B - 2 months, 4 months, 6 months, 12 to 15 months.

Pneumococcus - 2 months, 4 months, 6 months, 12 to 15 months.

Varicella - Between 12 and 15 months.

MMR - Between 12 and 18 months.

Birth	2	4	6	12-15	15-18	12-18	4-6y
Hep-B	DPT/IPV	DPT/IPV	DPT/IPV	Vari	DPT	MMR	DPT/IPV
	P/H.in	P/H.in	P/H.in	P/H.in			

Important Tips:

- Patient seen in office setting → Keep him in office and schedule appointments as per the results of tests available → unless it is essential to shift into ER or ward.
- Patient seen in ER → Try to manage there first → Shift to operation theater or ICU as per the need.
- When writing orders, you can save time by holding down control and selecting multiple orders with your mouse.
- Don't forget to advance the clock you will not get results and nothing will happen until you advance the clock.
- Advancing the clock: Before you advance the clock to get the results, think-can anything else can be done in this duration? Like you did limited examination in ER setting, now it is the time to complete remaining PE, this will advance the clock automatically. Avoid advancing clock just to get results, unless nothing else is remaining to perform.
- Get appropriate consults. You will get credit for this. However, once you ask for a consult, the computer may ask you to manage it yourself temporarily, as the consultant is busy. Don't worry. Do the routine pre-op stuff and stabilize the patient. Obtain consult: Any invasive investigation or procedure (Surgery, Cardiac catheterization, Orthopedic colonoscopy), Suicidal attempt, Drug overdose
- While admitting-don't forget ADMIT mnemonic: Type "Diet", it will give you all options like NPO, diabetic, low salt, low cholesterol etc.
- Interval history: Never forget to click over PE/History button frequently in ER/Admit patients. It doesn't harm at all. Rather you will know how your patient is improving or what else is required. Also perform the same whenever a patient returns for an appointment.
- Follow up tests at later date can work only on 5 minutes screen.
- LFT/lipid profile commonly employed to know side effects of medications.
- RATED SEX mnemonic can be ordered on every 5 mins screen just by typing "counsel"-after that use Ctrl button to choose multiple options of RATED SEX.

- Do not forget to mention all age and sex specific screenings on 5 mints screen (Which you wrote initially in step-1 as described above).
- Avoid un-necessary invasive procedures.
- Transfer from office to ER/ICU or ward:
 1. Unstable vitals-transfer to ER
 2. Alarming reports: To ICU/Floor
 3. Pneumonia/PID/Pyelonephritis case meeting admission criteria
- Order of procedure is possible on office visit also (You do not need to admit to get procedure done)→Simply consult the specialist→Order procedure→See the day/time of availability of result→Schedule appointment accordingly.
- Scheduled the appointment later but received alarming results →Can call patient even before →Click over "Move patient icon"
- Need ICU transfer and its already 5mints screen? →You may still transfer it to ICU !
- Young lady : Order B-hcg,CBC,BMP,UA
- Fever/infections: Blood Cx, Urine Cx (Add CSF is required)→Don't forget to advance clock by 1 minutes after Blood culture →before you start antibiotic.
- For emergency cases, the clock should be advanced "with the next available result" as management may change with individual results
- Change of location:
 1. Office setting: Follow ups→ Use obtain result/See patient later button to schedule appointments→usually prefer a day when all results of tests are available (No need to use change location button)→Do not forget that office is open Mon-Fri → So do not give appointment on Sat/Sun.
 2. ER setting: Try to deal the case maximum in ER itself → Transfer to operative room or ICU as per the need → Floor → Home least preferred place from ER.
 3. Shift to ICU if hemodynamically unstable
- In pain abdomen keep Ddx of AMI and perform ECG/Cardiac enzymes.
- In a case of domestic abuse: Unless the patient states she has alternate living arrangements, she should be admitted to the ward for her

own safety. She should not be discharged until appropriate social services intervention can be arranged → Don't forget consult, social services and advice safety plan

- Patients with **foreign body aspiration or anaphylaxis** are generally **admitted** to the hospital for observation to monitor for complications. Discharge depends on the individual clinical course.

- Fatigue case orders:
 1. CBC
 2. BMP
 3. UA
 4. TSH
 5. Fasting Glucose
 6. LFT
 7. Depression Index
- In any anemia do not forget to r/o co-existing iron deficiency anemia with Iron, TIBC, ferritin level → after therapy watch response with Reticulocyte counts.

- Pain abdomen case order:
 1. CBC
 2. BMP
 3. UA
 4. LFT
 5. Lipase
 6. Amylase
 7. Abd X-Ray acute series
 8. X-ray Chest PA
 9. ECG + Cardiac enzymes
 10. B-HCG
 11. Add Meperidine(RUQ)/Morphine + Metoclopramide for nausea/vomiting

- MVA case order:
 1. CBC
 2. BMP
 3. UA
 4. LFT
 5. Amylase
 6. Lipase
 7. X-ray Pelvis
 8. Ultrasound or CT abdomen
 9. X-Ray Abd Sup. Erect
 10. X-ray Chest
 11. ECG
 12. Cardiac Enzymes

- Any cardiac risk assessment required: Lipid profile, fasting glucose, ECG
- Going to insert needle in body e.g Lumbar puncture, Thracostomy. Arthrocentesis? → Check PT/PTT before you do that!
- Respiratory trouble? Remember Suction of secretions, Nebulized Albuterol + Ipratropium + IV Methylprednisolone, PEFR/PFT/FEV-1, Chest physiotherapy/Percussion therapy, ABG's → Order whatever applicable
- In any severely ill patient or infection like Meningitis/Febrile neutropenia examine the patient with interval history + CBC/BMP q 6hrly → Till improvement occurs → After that q12 hrs
- Same is applicable to H & H in bleeding state or MVA i.e. q 6 hrs till improvement.
- IV drug abuser/HIV/High risk sexual behavior → Also evaluate for HBV/HCV/VDRL etc
- When to transfuse blood? Hb <8 in bleeding state or <10 in non bleeding state
- Any bleeding like nose, Vaginal, Rectal, Upper GI or bruising → PT/PTT
- When PT is increased add oral Vitamin K → If both PT/PTT increased add FFP
- Whenever you inject FFP/Transfusion → Stop IV NSS for the time being and restart later on.
- In every seriously bleeding patient insert TWO large bore IV needles
- Any body NPO or on NSS due to instable hemodynamic should be restored back to oral food and fluid once he acquires normal BP/HR (120/80 & 90)

- No urine? → Insert Foley's first even though you know it could be ARF
- When acidosis(Hyperosmolar coma/DKA) associated with Hyponatremia use 0.9%NSS but when it is associated with Hypernatremia or Normal Na+ levels use 0.45% NSS → Dextrose + Insulin is used when K+ is more and you need to push it intracellular like Rhabdomyolysis(DKA use NSS with Insulin)
- Falling BP in serious conditions like (TSS/Anaphylaxis) not responding to NSS → Give IV Dopamine

5 mints screen:

- Note all IV orders → Convert them into PO or cancel
- Is the patient eating → Make him eating by mouth and order appropriate diet
- Any essential treatment you forget to mention? Order it now!
- Order all follow up tests now(Later date orders) like LFT/Lipid profile to assess drug side effects etc
- Also order all age/sex specific screening tests and vaccines
- RATED SEX (Modified in pediatric patient) → Pls ascertain about habits like smoking, alcohol or drugs etc before you counsel.

Step -4:

Follow 100 golden rules of CCS

Reproduced below:

1. If a patient has a fever, give acetaminophen (unless it is contraindicated)
2. If a patient is on a statin or you order a statin, get baseline LFTs and check frequently
3. If a patient is found to have abnormal LFTs, get a TSH
4. If a patient is going to surgery (including cardiac catheterization), make them NPO
5. All NPO patients must also have their urine output measured (type "urine output")
6. If a woman is between 12 and 52 years old and there is no mention of a very recent menses (that is, < 2 weeks ago), order a beta-hCG
7. Don't forget to discontinue anything that is no longer required (especially if you are sending the patient home)
8. When a patient is stable, decide whether or not you should change locations (if you anticipate that the patient could crash in the very near future, send the patient to the ICU; if the patient just needs overnight monitoring, send to the ward; if the patient is back to baseline, send home with follow-up)
9. In any diabetic (new or long-standing), order an HbA1c as well as continuous Accuchecks.
10. If this is a long-standing diabetic, also order an ophthalmology consult (to evaluate for diabetic retinopathy)
11. In any patient with respiratory distress (especially with low oxygen saturations), order an ABG
12. In any overdose, do a gastric lavage and activated charcoal (no harm in doing so, unless the patient is unconscious or has risk for aspiration)
13. In any suicidal patient, admit to ward and get "suicide contract" and "suicide precautions"
14. Patients who cannot tolerate Aspirin get Clopidogrel or Ticlopidine

15. Post-PTCA patients get Abciximab
16. In any bleeding patient, order PT, PTT, and Blood Type and Crossmatch (just in case they have to go to the O.R.)
17. In any pregnant patient, get "Blood Type and Rh" as well as "Atypical Antibody Screen"
18. In any patient with excess bleeding (especially GI bleeding), type "no aspirin" upon D/C of patient
19. If the patient is having any upper GI distress or is at risk for aspiration, order "head elevation" and "aspiration precautions"
20. In any asthmatic, order bedside FEV1 and PEFr (and use this to follow treatment progress)
21. Before you D/C a patient, change all IV meds to PO and all nebulizers to MDI
22. In any patient who has GI distress, make them NPO
23. All diabetic in-patients get Accuchecks, D/C oral hypoglycemic agents, start insulin, HbA1c, advise strict glycemic control, recommend diabetic foot care
24. All patients with altered mental status of unknown etiology get a "fingerstick glucose" check (for hypoglycemia), IV thiamine, IV dextrose, IV naloxone, urine toxicology, blood alcohol level, NPO
25. If hemolysis is in the differential, order a reticulocyte count
26. If you administer heparin, check platelets on Day 3 and Day 5 (for heparin-induced thrombocytopenia), as well as frequent H&H
27. If you administer coumadin, check daily PT/INR until it is within therapeutic range for two consecutive days
28. Before giving a woman coumadin, isotretinoin, doxycycline, OCPs or other teratogens, get a beta-hCG
29. If you give furosemide (Lasix), also give KCl (it depletes K+)
30. All children who are given gentamycin, should have a hearing test (audiometry) and check BUN/Cr before and after treatment
31. Don't forget about patient comfort! Treat pain with IV morphine, nausea with IV phenergan, constipation with PO docusate, diarrhea with PO

loperamide, insomnia with PO temazepam

32. ALL ICU patients get stress ulcer prophylaxis with IV omeprazole or ranitidine
33. If you put a patient on complete bedrest (such as those who are pre-op), get "pneumatic compression stockings"
34. If fluid status is vital to a patient's prognosis (such as those with dehydration, hypovolemia, or fluid overload), place a Foley catheter and order "urine output"
35. If a CXR shows an effusion, get a decubitus CXR next
36. If you intubate a patient you ALSO have to order "mechanical ventilation" (otherwise the patient will just sit there with a tube in his mouth!)
37. With any major procedure (including surgery, biopsy, centesis), you MUST type "consent for procedure" (typing consent will not reveal any results)
38. With any fluid aspiration (such as paracentesis or pericardiocentesis), get fluid analysis separately (it is not automatic). If you don't order anything on the fluid, it will just be discarded.
39. With high-dose steroids (such as in temporal arteritis), give IV ranitidine, calcium, vitamin D, alendronate, and get a baseline DEXA scan.
40. In all suspected DKA or HHNC, check osmolality and ketone levels in the serum.
41. In ALCOHOLIC ketoacidosis, just give dextrose (no need for insulin), in addition to IV normal saline and thiamine
42. All patients over 50 with no history of FOBT or colonoscopy should get a rectal exam, a FOBT, and have a sigmoidoscopy or colonoscopy scheduled.
43. All women > 40 years old should get a yearly clinical breast exam and mammogram (if risk factors are present, start at 35)
44. All men > 50 years old should get a prostate exam and a PSA (if risk factors are present, start at 45)
45. If a patient has a terminal disease, advise "advanced directives"
46. In any patient with a chronic disease that can cause future altered mental status, type "medical alert bracelet" upon D/C

47. Any patient with diarrhea should have their stool checked for "ova and parasites", "white cells", "culture", and C.diff antigen (if warranted)
48. Any patient on lithium or theophylline should have their levels checked
49. All patients with suspected MI should be given a statin (and check baseline LFTs)
50. All suspected hemolysis patients should get a direct Coombs test
51. Schedule all women older than 18 for a Pap smear (unless she has had a normal Pap within one year)
52. Pre-op patients should have the following done: "NPO", "IV access", "IV normal saline", "blood type and crossmatch", "analgesia", "PT", "PTT", "pneumatic compression stockings", "Foley", "urine output", "CBC", and any appropriate antibiotics
53. If a patient requires epinephrine (such as in anaphylaxis), and he/she is on a beta-blocker, give glucagon first
54. If lipid profile is abnormal, order a TSH
55. All dementia and alcoholic patients should be advised "no driving"
56. To diagnose Alzheimer's, first rule out other causes. Order a CT head, vitamin B12 levels, folate levels, TSH, and routine labs like CBC, BMP, LFT, UA. Also, if the history suggests it, order a VDRL and HIV ELISA as well
57. Also rule out depression in suspected dementia patients
58. For all women who are sexually active and of reproductive age, give folate. In fact, you should give ALL your patients a multivitamin upon D/C home
59. All pancreatitis patients should be made NPO and have NG suction so that no food can stimulate the pancreas
60. Send patients home on a disease-specific diet: diabetics get a "diabetic diet", hypertensives get a "low salt diet", irritable bowel patients get a "high fiber diet", hepatic failure patients get "low protein diet", etc
61. Do not give a thrombolytic (tPA or streptokinase) in a patient with unstable angina patient
62. Patients who are having a large amount of secretions, order "pulmonary toilet" to reduce the risk of aspiration

63. Every patient should be advised to wear a "seatbelt", to "exercise", and advised about "compliance"
64. In any patient who presents with an unprotected airway (as in overdoses, comatoses), get a CXR to rule out aspiration
65. In any patient with one sexually transmitted disease (such as Trichomonas), check for other STDs as well (Gonorrhea, Chlamydia, HIV, syphilis, etc.) and do a Pap smear in all women with an STD
66. Remember to treat children with croup with a "mist tent" and racemic epinephrine
67. Any acute abdomen patient with a suspected or proven perforation, give a TRIPLE antibiotic: Gentamycin, Ampicillin, Metronidazole
68. Get iron studies in patients with microcytic anemia if the cause is unknown. Order "iron", "ferritin", "TIBC"
69. Women with vaginal discharge should get a KOH prep, saline (wet) prep, vaginal pH, cervical gonococcal, chlamydia culture
70. If a woman is found to have vaginal candida, check her fasting glucose
71. When the 5 minute warning screen is displayed, go through the following mnemonic (RATED SEX). I know it probably is not the best mnemonic, but it is difficult to forget!:
- Recreational drugs / Reassurance
 - Alcohol
 - Tobacco
 - Exercise
 - Diet (eg. high protein, no lactose, low fat, etc.)
 - Seat belt / Safety plan / Suicide precautions
 - Education ("patient education")
 - X (stands for safe seX)
72. All suspected child abuse patients should be admitted and you should order THREE consults: consult "child protection services", consult "ophthalmology" (to look for retinal hemorrhages), consult "psychiatrist" (to examine the family dynamics)
73. When a woman reaches menopause, she should have a "fasting lipid

profile" checked (because without estrogen, the LDL will rise and the HDL will drop), a DEXA scan (for baseline bone density), and of course, FOBT and colonoscopy (if she is over 50)

74. If colon cancer is suspected, order a CEA; if pancreatic cancer, order CA 19-9; if ovarian cancer, order CA 125.

75. Remember to give "phototherapy" to a newborn with pathologic unconjugated bilirubinemia (it is not helpful if it is predominantly conjugated). Also, with phototherapy, keep the neonate on IV fluids (the heat can dehydrate them), and give erythromycin ointment in their eyes

76. Before giving a child prednisone, get a PPD

77. If a patient is found to have high triglycerides, check "amylase" and "lipase" (high triglycerides can cause pancreatitis)

78. Remember that any newborn under 3 weeks of age who develops a fever is SEPSIS until proven otherwise. Admit to the ward and culture

EVERYTHING: "blood culture", "urine culture", "sputum culture", and even "CSF culture". And give antibiotics to cover EVERYTHING.

79. If you get a high lead level in a child, you have to check a "venous blood lead level" to confirm. If the value is > 70, admit immediately and begin IV "dimercaprol" and "EDTA". Order "lead abatement agency" and "lead pain assay" upon discharge.

80. If you perform arthrocentesis, send the synovial fluid for "gram stain" and the 3 Cs: "crystals", "culture", and "cell count"

81. If a patient has exophthalmos with hyperthyroidism, it is not enough to just treat the hyperthyroidism (as the eye findings may worsen). You should give prednisone.

82. If any patient has cancer, get an "oncology consult".

83. In a patient with rapid atrial fibrillation, decrease the heart rate first (then worry about converting to sinus rhythm). Use a CCB (diltiazem) or a beta-blocker (metoprolol) for rate control.

84. In any patient with new-onset atrial fibrillation, make sure you check a TSH

85. In any patient with suspected fluid volume depletion, order "postural

vitals" to detect orthostasis

86. Before a colonoscopy or a sigmoidoscopy, you should prepare the bowel: make the patient NPO, give IV fluids (if necessary) and order "polyethylene glycol".

87. Any patient with Mobitz II or complete heart block gets an immediate "transcutaneous pacemaker". Then order a cardiology consult to implant a "transvenous pacemaker"

88. If calcium level is abnormal, order a "serum magnesium", "serum phosphorus", and "PTH"

89. Treat both malignant hyperthermia and neuroleptic malignant syndrome with "dantrolene"

90. All splenectomy patients get a "pneumovax", an "influenza" vaccine, and a "hemophilus" vaccine if not previously given.

91. If you give INH (for Tb), also give "pyridoxine" (this is vitamin B6)

92. If you give pyrazinamide, get baseline "serum uric acid" levels

93. If you give ethambutol, order an ophthalmology consult (to follow possible optic neuritis)

94. If you perform a thoracentesis (lung aspirate), send the EFFUSION as well as a peripheral blood sample for: LDH and protein (to help differentiate a transudate versus an exudates) and pH of the effusion

95. Give sickle cell disease children prophylactic penicillin continuously until they turn 5 years old

96. Any patient with a recent anaphylactic reaction (for any reason), should get "skin test" for allergens (to help prevent future disasters) and consult an allergist

97. Do not give cephalosporins to any patient with anaphylactic penicillin allergies (there is a 5% cross-reactivity)

98. Order Holter monitor on patients who have had symptomatic palpitations.

99. Any patient with a first-time panic attack gets a "urine toxicology" screen, a TSH, and "finger stick glucose"

100. All renal failure patients get: "nephrology consult", "calcium acetate" (to decrease the phosphorus levels), "calcium" supplement, and erythropoietin