

Enabling Knowledge Objectives

Essential Diagnoses/Syndromes

Diseases and syndromes within each of the relevant Internal Medicine Clinical Presentations have been divided into 'essential' and 'less important' entities.

At the end of the eight-week clerkship, it is expected that the clerk will be able to **diagnose** these 'essential' diseases and syndromes, and **to a lesser extent** treat them, as demonstrated by successful completion of the summative written examination and the in-training performance evaluation reports.

Conditions deemed 'essential' (*as summarized in Table 1*) have been categorized in this manner for a number of possible reasons, including:

- Common
- Acute presentations needing acute management
- Potential grave complications of missing diagnosis
- Important part of differential diagnosis for a given clinical presentation

For these reasons, 'essential' causes will make up most of the examination diagnoses. However, the final diagnosis on an examination question may be a 'secondary' cause, but the 'essential' cause(s) will feature highly in the differential diagnosis.

'Secondary' causes may be common diseases (ex: vasovagal syncope, chest wall pain) that may in fact be the final diagnosis on an examination question, but are listed as 'secondary' for reasons such as:

- Benign disease
- No specific treatment
- Diagnosis of exclusion (excluding the 'essential' causes)
- No specific diagnostic test for condition

Where a syndrome is listed (ex: hemolysis), the diagnosis of the syndrome is considered essential, and unless stated otherwise, the specific causes (ex: sickle cell) are less important.

Drug classes and their side-effects have been listed separately in section D, Table 2.

The numbers assigned to each clinical presentation correspond to their numbers in the main University of Calgary Medical School Clinical Presentation list.

GENERAL

03. FEVER AND CHILLS

- **ESSENTIAL**
 - INFECTIOUS CAUSES: MENINGITIS, ENCEPHALITIS, PNEUMONIA (ATYPICAL AND TYPICAL COMMUNITY-ACQUIRED +/- EMPYEMA), MYCOBACTERIUM TUBERCULOSIS, HIV, ENDOCARDITIS, UTI/PYELO, SEPTIC JOINT
 - NEOPLASTIC CAUSES: LYMPHOMAS, LEUKEMIAS, CARCINOMAS (LUNG)
 - COLLAGEN VASCULAR DISEASES: SLE, RA
 - OTHER: SARCOIDOSIS, INFLAMMATORY BOWEL
- **SECONDARY**
 - INFECTIOUS CAUSES: ASPIRATION AND NOSOCOMIAL PNEUMONIAS, LUNG ABSCESS, BONE, GASTROINTESTINAL, SKIN INFECTIONS
 - RHEUMATIC FEVER, SEXUALLY TRANSMITTED DISEASES
 - OTHER CARCINOMAS

RETICULOENDOTHELIAL

06. ANEMIA/PALLOR/FATIGUE

- **ESSENTIAL**

- MICROCYTIC CAUSES: IRON DEFICIENCY, ANEMIA OF CHRONIC DISEASE
- NORMOCYTIC CAUSES: ACUTE BLOOD LOSS (SEE 96,97), BONE MARROW FAILURE, MULTIPLE MYELOMA, HEMOLYSIS (INCLUDING TRANSFUSION REACTIONS), CHRONIC RENAL FAILURE (SEE 44)
- MACROCYTIC CAUSES: B12 DEFICIENCY
- SECONDARY
 - THALASSEMIAS
 - FOLATE DEFICIENCIES

07. BLEEDING TENDENCY/BRUISING

- **ESSENTIAL**
 - PLATELET CAUSES: THROMBOCYTOPENIA
 - DECREASED PRODUCTION (SEE ALSO 'ANEMIA', BONE MARROW CAUSES)
 - SEQUESTRATION (SEE ALSO 'SPLENOMEGALY')
 - DESTRUCTION: DIC, ITP, SLE, TTP/HUS
 - COAGULATION CAUSES: LIVER DISEASE-RELATED, DIC
 - VASCULAR CAUSES: VASCULITIS
- SECONDARY
 - PLATELET CAUSES: VON WILLEBRAND'S
 - COAGULATIN CAUSES: HEMOPHILIA, VITAMIN K DEFICIENCY

08. ELEVATED HEMATOCRIT/POLYCYTHEMIA

- SECONDARY
 - POLYCYTHEMIA RUBRA VERA (PRV)
 - SECONDARY CAUSES: HYPOXIA, ERYTHROPOEITIN-SECRETING TUMOUR

09. PAINFUL LIMB

09A PAINFUL SWOLLEN LIMB

- **ESSENTIAL**
 - EDEMA (SEE 35 BELOW), DEEP VEIN THROMBOSIS (SEE 09B BELOW)
- SECONDARY
 - INFECTIONS (BONE, SOFT TISSUE, JOINT)

09B VENOUS THROMBOSIS/HYPERCOAGULABLE STATES

- **ESSENTIAL**
 - DVT TRIAD: TRAUMA, STASIS, HYPERCOAGULABILITY
 - CAUSES OF HYPERCOAGULABILITY: MALIGNANCY, NEPHROTIC SYNDROME, INFLAMMATORY BOWEL DISEASE
- SECONDARY
 - OTHER CAUSES OF HYPERCOAGULABILITY: PROTEIN C, S, ANTI-THROMBIN III DEFICIENCY, APC RESISTANCE

09C INTERMITTENT CLAUDICATION

- SECONDARY
 - PERIPHERAL VASCULAR DISEASE

10. ABNORMALITIES OF WHITE CELLS

- **ESSENTIAL**
 - NEOPLASTIC CAUSES OF LYMPHOCYTOSIS: ALL, AML
- **SECONDARY**
 - NEOPLASTIC: CLL, CML
 - CAUSES OF REACTIVE LYMPHOCYTOSIS (VIRAL, BACTERIAL INFECTIONS)
 - ALL CAUSES OF: NEUTROPENIA, NEUTOPHILIA

11. LYMPHADENOPATHY: GENERALIZED

- **ESSENTIAL**
 - DIFFUSE LYMPHADENOPATHY, NEOPLASTIC CAUSES: LYMPHOMA (HODGKIN'S, NHL)
 - DIFFUSE LYMPHADENOPATHY, REACTIVE CAUSES: INFECTIONS (HIV), INFLAMMATORY (SLE, RA, SARCOIDOSIS)
- **SECONDARY**
 - CAUSES OF LOCALIZED LYMPHADENOPATHY

12. SPLENOMEGALY

- **ESSENTIAL**
 - CAUSES: LIVER DISEASES, INFECTIONS (HIV), NEOPLASTIC (LYMPHOMAS/LEUKEMIAS), HEMOLYSIS, INFLAMMATORY (SLE, RA, SARCOIDOSIS)

13. FEVER IN THE IMMUNOCOMPROMISED HOST

- **ESSENTIAL**
 - SAME AS FOR 'FEVER' (003)
- **SECONDARY**
 - FEBRILE NEUTROPENIA

MUSCULOSKELETAL AND SKIN

18. JOINT PAIN, MONO-ARTICULAR (ACUTE, CHRONIC)

- **ESSENTIAL**
 - OSTEOARTHRITIS
 - SEPTIC JOINT
 - CRYSTAL-INDUCED: GOUT/PSEUDOGOUT
 - SYSTEMIC DISEASE, MONOARTICULAR PRESENTATION: SLE, RA
 - INFLAMMATORY AXIAL CAUSE: REACTIVE ARTHRITIS (REITER'S SYNDROME)
- **SECONDARY**
 - TRAUMA
 - INFLAMMATORY AXIAL CAUSES: ANKYLOSING SPONDYLITIS, PSORIATIC ARTHRITIS, INFLAMMATORY BOWEL ASSOCIATED

19. JOINT PAIN, POLYARTICULAR (ACUTE, CHRONIC)

- **ESSENTIAL**
 - INFLAMMATORY, SYMMETRIC CAUSES: RHEUMATOID ARTHRITIS, SLE
 - INFLAMMATORY, ASYMMETRIC CAUSE: REACTIVE ARTHRITIS (REITER'S SYNDROME)
 - NON-INFLAMMATORY CAUSE: OSTEOARTHRITIS
- **SECONDARY**
 - OTHER CAUSES: VIRAL ARTHRITIS, PSORIATIC ARTHRITIS, RHEUMATIC FEVER

20. REGIONAL PAIN, NON-ARTICULAR (HAND, WRIST, ELBOW, SHOULDER, SPINE, HIPS, KNEE, FOOT)

- **ESSENTIAL**
 - NERVE ROOT DISTRIBUTIONS (SENSORY, MOTOR, REFLEXES)
 - POLYMYALGIA RHEUMATICA/GIANT-CELL ARTERITIS
- **SECONDARY**
 - FIBROMYALGIA

CARDIOVASCULAR SYSTEM

23. CHEST DISCOMFORT

- **ESSENTIAL**
 - CARDIOVASCULAR CAUSES: ANGINA/MYOCARDIAL INFARCTION, AORTIC DISSECTION, PERICARDITIS (AND ITS CAUSES)
 - RESPIRATORY CAUSES: PLEURAL DISEASE (SEE 29C), PNEUMONIA (SEE 03), PNEUMOTHORAX, PULMONARY EMBOLUS
- **SECONDARY**
 - OTHER CAUSES: CHEST WALL, SKIN DISEASES, GASTROINTESTINAL DISEASES, PSYCHOGENIC

24. LOSS OF CONSCIOUSNESS/SYNCOPE/PRESYNCOPE

- **ESSENTIAL**
 - SEIZURES (SEE 70)
 - CEREBROVASCULAR CAUSES: STROKE (TIA)
 - CARDIOVASCULAR CAUSES:
 - MECHANICAL: AORTIC STENOSIS
 - ELECTRICAL:
 - BRADYARRHYTHMIAS: HEART BLOCKS
 - TACHYARRHYTHMIAS: ATRIAL FIBRILLATION, VENTRICULAR TACHYCARDIA
 - METABOLIC CAUSES: HYPOXIA (SEE 29), HYPOGLYCEMIA
- **SECONDARY**
 - REFLEX/UNDERFILL CAUSES: VASOVAGAL, ORTHOSTATIC
 - PSYCHOGENIC

25. PALPITATIONS (ABNORMAL ECG)

- **ESSENTIAL**
 - CAUSES: ATRIAL FIBRILLATION, VENTRICULAR TACHYCARDIA
- **SECONDARY**
 - CAUSES: SUPRAVENTRICULAR TACHYCARDIA, WOLFF-PARKINSON-WHITE

26. SHOCK (HYPOTENSION)

- **ESSENTIAL**
 - CARDIOGENIC CAUSES: MYOCARDIAL INFARCTION, ENDOCARDITIS, AORTIC DISSECTION
 - HYPOVOLEMIC CAUSES: ACUTE BLOOD LOSS (SEE 96,97), PANCREATITIS
 - DISTRIBUTIVE: SEPSIS (SEE 03)
 - OBSTRUCTIVE: TENSION PNEUMOTHORAX, PULMONARY EMBOLUS, PERICARDIAL TAMPONADE

27. CARDIAC ARREST/CARDIOVASCULAR COLLAPSE

- **ESSENTIAL**
 - CAUSES LISTED AS 'ESSENTIAL' IN OTHER CLINICAL PRESENTATIONS

28.**MURMUR****28A SYSTOLIC MURMUR****- ESSENTIAL**

- AORTIC STENOSIS, MITRAL REGURGITATION

- SECONDARY

- TRICUSPID REGURGITATION, PULMONARY STENOSIS, VENTRICULAR SEPTAL DEFECT

28B DIASTOLIC MURMUR**- ESSENTIAL**

- MITRAL STENOSIS, AORTIC REGURGITATION

- SECONDARY

- TRICUSPID STENOSIS, PULMONARY REGURGITATION

RESPIRATORY SYSTEM**29.****COUGH AND DYSPNEA****- ESSENTIAL**

- CARDIAC CAUSES: UNSTABLE ANGINA, CONGESTIVE HEART FAILURE (PULMONARY EDEMA), PERICARDIAL TAMPONADE
- RESPIRATORY CAUSES: ASTHMA, COPD, PULMONARY EMBOLUS, PNEUMONIA (SEE 03), PNEUMOTHORAX, PLEURAL DISEASE (SEE 29C), LUNG CANCER, INTERSTITIAL LUNG DISEASES (ESP. SARCOIDOSIS, RA)
- OTHER: ANEMIA (SEE 06), HYPERTHYROIDISM (SEE 48A), METABOLIC ACIDOSIS (SEE 31A)

- SECONDARY

- PULMONARY HYPERTENSION, CHEST WALL/MUSCULAR, UPPER AIRWAY, CNS, FOREIGN BODY, PSYCHOGENIC

29A COUGH AND/OR DYSPNEA WITH NORMAL CHEST X-RAY**- ESSENTIAL**

- CARDIAC CAUSES: TAMPONADE (NORMAL LUNGS ON X-RAY), UNSTABLE ANGINA
- RESPIRATORY CAUSES: PULMONARY EMBOLUS, ASTHMA, COPD,
- OTHER: ANEMIA (SEE 06), HYPERTHYROIDISM (SEE 48A), METABOLIC ACIDOSIS (SEE 31A)

- SECONDARY

- PULMONARY HYPERTENSION, CHEST WALL/MUSCULAR, UPPER AIRWAY, CNS, FOREIGN BODY, PSYCHOGENIC

29B COUGH AND/OR DYSPNEA WITH DIFFUSE CHEST X-RAY ABNORMALITY**- ESSENTIAL**

- CAUSES: PULMONARY EDEMA, ATYPICAL PNEUMONIA, TUBERCULOSIS, INTERSTITIAL LUNG DISEASES (ESP. SARCOIDOSIS, RA)

- SECONDARY

- OTHER CAUSES OF INTERSTITIAL LUNG DISEASES: PNEUMOCONIOSIS, IDIOPATHIC PULMONARY FIBROSIS, SCLERODERMA, GRANULOMATOSIS WITH POLYANGITIS (WEGENER'S), ANTI-GBM DISEASE (GOODPASTURE'S), LYMPHANGITIC CARCINOMATOSIS, RADIATION INJURY, METHOTREXATE LUNG

29C COUGH AND/OR DYSPNEA WITH PLEURAL ABNORMALITY**- ESSENTIAL**

- PNEUMOTHORAX
- PLEURAL EFFUSION
 - TRANSUDATIVE: CHF, CIRRHOSIS, NEPHROTIC SYNDROME
 - EXUDATIVE: PULMONARY EMBOLUS, MALIGNANCY (LUNG), PNEUMONIA/EMPYEMA (SEE 03), RA, SLE, PANCREATITIS

- SECONDARY

- MESOTHELIOMA
- OTHER METASTATIC MALIGNANCIES (BREAST, OVARIAN)
- CHYLOTHORAX

29D COUGH AND/OR DYSPNEA WITH LOCAL CHEST X-RAY ABNORMALITY

- **ESSENTIAL**
 - PRIMARY LUNG CANCER, TUBERCULOSIS, RA
- SECONDARY
 - OTHER INFECTIONS (HISTOPLASMOMA), PULMONARY INFARCT, GRANULOMATOSIS WITH POLYANGITIS (WEGENER'S), VASCULAR MALFORMATIONS
 - PLEURAL/MEDIASTINAL MASSES

29E COUGH, DYSPNEA AND FEVER

- **ESSENTIAL**
 - PNEUMONIA (SEE 03), EXACERBATION OF COPD, PULMONARY EMBOLUS
- SECONDARY
 - LUNG ABSCESS

30. HYPOXIA, HYPOXEMIA, CYANOSIS

- **ESSENTIAL**
 - ALL CAUSES PREVIOUSLY LISTED AS ESSENTIAL UNDER COUGH/DYSPNEA (SEE 29)
- SECONDARY
 - ALL CAUSES PREVIOUSLY LISTED AS ESSENTIAL UNDER COUGH/DYSPNEA (SEE 29)

31. ABNORMAL SERUM HYDROGEN ION CONCENTRATION

- **ESSENTIAL**
 - 31 A: METABOLIC ACIDOSIS
 - HIGH ANION GAP CAUSES
 - ENDOGENOUS: DIABETIC KETOACIDOSIS, RENAL FAILURE (SEE 34)
 - EXOGENOUS: SALICYLATE OVERDOSE
- SECONDARY
 - 31A METABOLIC ACIDOSIS
 - HIGH ANION GAP CAUSES:
 - ENDOGENOUS: LACTIC ACIDOSIS, STARVATION KETOACIDOSIS
 - EXOGENOUS: METHANOL, ETHYLENE GLYCOL OVERDOSE
 - NORMAL ANION GAP CAUSES: DIARRHEA, RTA
 - 31B METABOLIC ALKALOSIS
 - CHLORIDE RESPONSIVE CAUSES: VOMITING, DIURETICS
 - CHLORIDE UNRESPONSIVE CAUSES: HYPERALDOSTERONISM (CONN'S), CUSHING'S, BARTTER'S
 - 31C/D RESPIRATORY ACIDOSIS/ALKALOSIS

32. HEMOPTYSIS

- **ESSENTIAL**
 - CAUSES PREVIOUSLY CONSIDERED ESSENTIAL CAUSES OF COUGH AND DYSPNEA (TUMOUR, INFECTION, COPD, SLE, PULMONARY EDEMA, PULMONARY EMBOLUS)
- SECONDARY
 - CAUSES PREVIOUSLY CONSIDERED LESS IMPORTANT CAUSES OF COUGH/DYSPNEA (BENIGN TUMOURS, VASCULAR MALFORMATIONS, GRANULOMATOSIS WITH POLYANGITIS (WEGENER'S), ANTI-GBM DISEASE (GOODPASTURE'S))

RENAL - ELECTROLYTES SYSTEM

34. RENAL FAILURE, ACUTE

- **ESSENTIAL**
 - PRE-RENAL CAUSES: CAUSES OF SHOCK (SEE 26)
 - RENAL CAUSES:
 - GLOMERULAR: SLE, TTP/HUS
 - ACUTE TUBULAR NECROSIS (ISCHEMIC AND TOXIC)
 - INTERSTITIAL:
 - ACUTE INTERSTITIAL NEPHRITIS: BROAD CATEGORIES ONLY (DRUGS, INFECTION)
 - RHABDOMYOLYSIS
 - CAST NEPHROPATHY: GOUT (URIC ACID), MULTIPLE MYELOMA
- SECONDARY
 - POST RENAL CAUSES
 - THE SPECIFIC CAUSES OF ACUTE INTERSTITIAL NEPHRITIS
 - OTHER CAUSES OF ACUTE GLOMERULONEPHRITIS: HENOC-SCHONLEIN PURPURA, SCLERODERMA, GRANULOMATOSIS WITH POLYANGITIS (WEGENER'S), ANTI-GBM DISEASE (GOODPASTURE'S), POST STREPTOCOCCAL)

36. GENERALIZED EDEMA

- **ESSENTIAL**
 - RENAL FAILURE [34], CIRRHOSIS, NEPHROTIC SYNDROME, CONGESTIVE HEART FAILURE, HYPOTHYROID [48B]
- SECONDARY
 - HYPOALBUMINEMIA (AND ITS SPECIFIC CAUSES)
 - ANGIOEDEMA, DRUGS, VENOUS/LYMPHATIC DRAINAGE, INCREASED CAPILLARY PERMEABILITY (AND ITS SPECIFIC CAUSES)

37. ABNORMAL SERUM SODIUM CONCENTRATION

37A HYPONATREMIA

- **ESSENTIAL**
 - HYPOVOLEMIC (DIURETICS)
 - EUVOLEMIC: SIADH (AND ITS BROAD CATEGORIES OF CAUSES)
 - EDEMA STATES (SEE 36)
- SECONDARY
 - ARTIFACTUAL, PRIMARY POLYDIPSIA

37B HYPERNATREMIA

- SECONDARY
 - DIABETES INSIPIDUS, HYPERALDOSTERONISM

38. POLYURIA

- **ESSENTIAL**
 - DIABETES MELLITUS (SEE 53)
- SECONDARY
 - DIABETES INSIPIDUS, PRIMARY POLYDIPSIA

39. HYPERTENSION

- **ESSENTIAL**
 - CAUSES:
 - PRIMARY HYPERTENSION (INCLUDING HYPERTENSIVE CRISIS)
 - SECONDARY CAUSES: RENAL PARENCHYMAL DISEASE (SEE 34, 44), ALCOHOL (SEE 76)
- SECONDARY
 - RENAL: TRANSPLANT, RENAL ARTERY STENOSIS
 - HYPERALDOSTERONISM (CONN'S SYNDROME), PHEOCHROMOCYTOMA, THYROID DISEASE
 - COARCTATION OF THE AORTA

40. ABNORMAL SERUM POTASSIUM CONCENTRATION/WEAKNESS/FATIGUE

40A HYPOKALEMIA

- **ESSENTIAL**

- BROAD CATEGORIES OF CAUSES: INTAKE, REDISTRIBUTION, LOSS (RENAL AND GI)
- SECONDARY
 - THE SPECIFIC CAUSES (UNLESS CONSIDERED ESSENTIAL ELSEWHERE)
- 40B HYPERKALEMIA (FATIGUE, HYPERPIGMENTATION)
 - **ESSENTIAL**
 - LEUKEMIAS AS CAUSE OF PSEUDOHYPERKALEMIA
 - REDISTRIBUTION CAUSES: DKA/INSULIN DEFICIENCY, HEMOLYSIS, RHABDOMYOLYSIS, NON-ANION GAP ACIDOSIS (SEE 31A)
 - DECREASE EXCRETION CAUSES: RENAL FAILURE (SEE 34,44), ADRENAL INSUFFICIENCY (ADDISON'S DISEASE)
 - SECONDARY
 - INTAKE INCREASE
 - REDISTRIBUTION CAUSES: TRAUMA/CRUSH, TUMOUR LYSIS
 - DECREASED EXCRETION CAUSES: HYPORENINEMIC-HYPOALDOSTERONISM

41. DYSURIA

- **ESSENTIAL**
 - URINARY TRACT INFECTION (CYSTITIS, PYELONEPHRITIS)
- SECONDARY
 - PROSTATITIS, URETHRITIS (STD), IRRITABLE BLADDER

42. HEMATURIA

- **ESSENTIAL**
 - DIFFERENTIATING EXTRAGLOMERULAR FROM GLOMERULAR HEMATURIA
- 42A HEMATURIA, EXTRARENAL
 - **ESSENTIAL**
 - CYSTITIS
 - SECONDARY
 - NEPHROLITHIASIS, TRAUMA, BLADDER CANCER, PROSTATITIS, URETHRITIS

42B HEMATURIA, INTRARENAL, EXTRAGLOMERULAR

- **ESSENTIAL**
 - PYELONEPHRITIS
 - VASCULAR
 - HYPERTENSIVE NEPHROSCLEROSIS
 - TUBULOINTERSTITIAL
 - SLE, SARCOIDOSIS, MULTIPLE MYELOMA, URATE NEPHROPATHY
- SECONDARY
 - RENAL TUMOURS/CYSTS
 - TUBULOINTERSTITIAL
 - SJOGREN'S, SCLERODERMA, OTHER VASCULAR (DM/PAPILLARY NECROSIS, SICKLE CELL)

42B HEMATURIA, GLOMERULAR

- **ESSENTIAL**
 - SYSTEMIC (OTHER ORGAN INVOLVEMENT) CAUSES: SLE, HUS/TTP, MALIGNANT HYPERTENSION
 - POSTINFECTION: ENDOCARDITIS
- SECONDARY
 - NONSYSTEMIC CAUSES (ISOLATED): IGA NEPHROPATHY
 - SYSTEMIC CAUSES: GRANULOMATOSIS WITH POLYANGITIS (WEGENER'S), ANTI-GBM DISEASE (GOODPASTURE'S), HENOCCH-SCHONLEIN PURPURA, POLYARTERITIS NODOSA
 - POSTINFECTION: POST-STREP

43. PROTEINURIA

- **ESSENTIAL**
 - OVERFLOW PROTEINURIA
 - MULTIPLE MYELOMA
 - TUBULOINTERSTITIAL
 - SLE, SARCOIDOSIS, URATE NEPHROPATHY, MULTIPLE MYELOMA
 - GLOMERULAR/NEPHROTIC SYNDROME
 - SLE, DIABETES MELLITUS, MALIGNANT HYPERTENSION
- SECONDARY
 - TUBULOINTERSTITIAL CAUSES
 - SJOGREN'S, SCLERODERMA, VASCULAR (DM/PAPILLARY NECROSIS, SICKLE CELL)
 - GLOMERULAR CAUSES
 - PRIMARY GLOMERULAR DISEASE (MINIMAL CHANGE, FOCAL SCLEROSIS, MEMBRANOUS GN)
 - AMYLOIDOSIS

44. RENAL FAILURE, CHRONIC

- **ESSENTIAL**
 - SECONDARY GLOMERULAR CAUSES: HYPERTENSION, DIABETES, SLE
 - TUBULOINTERSTITIAL CAUSES (LISTED AS ESSENTIAL IN 43)
- SECONDARY
 - PRE-RENAL CAUSES: RENAL ARTERY STENOSIS, EMBOLI
 - PRIMARY GLOMERULAR DISEASE (SEE 43)
 - POLYCYSTIC KIDNEY DISEASE
 - TUBULOINTERSTITIAL CAUSES (SEE 43)
 - POST-RENAL CAUSES
 -

ENDOCRINE-METABOLIC

46. ADRENAL MASS

- SECONDARY
 - HYPERCORTICOLISM (CUSHING'S), PHEOCHROMOCYTOMA, HYPERALDOSTERONISM (CONN'S)

48. NECK MASS

- SECONDARY
 - PAINFUL CAUSES: THYROIDITIS, INFECTION, TRAUMA
 - PAINLESS CAUSES: CANCER, CYSTS, ADENOMA

48A HYPERTHYROIDISM

- **ESSENTIAL**
 - GRAVE'S DISEASE
- SECONDARY
 - PITUITARY TUMOUR
 - THYROIDITIS, MULTINODULAR GOITRE, TOXIC ADENOMA

48B HYPOTHYROIDISM

- **ESSENTIAL**
 - HASHIMOTO'S
- SECONDARY
 - THYROIDITIS (POSTPARTUM, SUBACUTE)
 - PITUITARY FAILURE

49. **ABNORMALITIES OF BLOOD CHOLESTEROL/LIPIDS**

- **ESSENTIAL**
 - SECONDARY CAUSES OF:
 - HYPERCHOLESTEROLEMIA (LDL): NEPHROTIC SYNDROME, HYPOTHYROIDISM, CHOLESTATIC LIVER DISEASES (ESP. PRIMARY BILIARY CIRRHOSIS)
 - HYPERTRYGLYCERIDEMIA: ALCOHOL (SEE 76), DIABETES (SEE 53)
- SECONDARY
 - PRIMARY CAUSES OF ABNORMAL LIPIDS
 - OTHER LIFESTYLE (DIET, SEDENTARY, SMOKING) CAUSES OF ABNORMAL LIPIDS

53. **HYPERGLYCAEMIA, DIABETES (HYPOGLYCEMIA)**

- **ESSENTIAL**
 - PRIMARY CAUSES: IDDM, NIDDM (INCLUDING ALL COMPLICATIONS, DKA)
 - SECONDARY CAUSES: HEMOCHROMATOSIS
 - IATROGENIC HYPOGLYCEMIA
- SECONDARY
 - SECONDARY CAUSES: PREGNANCY, ACROMEGALY, CUSHING'S, PHEOCHROMOCYTOMA, PANCREATIC INSUFFICIENCY (CHRONIC PANCREATITIS, CF)
 - HYPOGLYCEMIA: POSTPRANDIAL, EXERCISE, INSULINOMA

54. **ABNORMAL SERUM CALCIUM CONCENTRATION**

54A HYPERCALCEMIA

- **ESSENTIAL**
 - HYPERPARATHYROIDISM, LUNG CARCINOMA (SQUAMOUS CELL), MULTIPLE MYELOMA, SARCOIDOSIS
- SECONDARY
 - MILK-ALKALI SYNDROME, OSTEOLYTIC METASTASES, IMMOBILIZATION, PAGET'S, VITAMIN D RELATED

54B HYPOCALCEMIA

- **ESSENTIAL**
 - HYPOPARATHYROIDISM, PANCREATITIS, RENAL FAILURE
- SECONDARY
 - OSTEOLYTIC METASTASES, CALCITONIN EXCESS, LOW VITAMIN D/MALABSORPTION

NEUROSCIENCES - PART I

57. MUSCLE WEAKNESS (PARALYSIS, PARESIS)

- **ESSENTIAL**
 - CNS/BRAIN STEM CAUSES: CEREBROVASCULAR ACCIDENTS (HEMORRHAGE, THROMBOTIC OR EMBOLIC INFARCTION)
 - SPINAL CORD CAUSES: B12 DEFICIENCY
 - PNS CAUSES: ACUTE INFLAMMATORY DEMYELINATING NEUROPATHY - AIDP (GUILLAIN-BARRE SYNDROME), DIABETIC (SEE 53)/ALCOHOLIC NEUROPATHY (SEE 76)
 - MYOPATHY: THYROID DISEASE (SEE 48), HYPERPARATHYROIDISM, ALCOHOL (SEE 76), POTASSIUM DISTURBANCES (SEE 40)
- **SECONDARY**
 - CNS BRAIN STEM CAUSES: TUMOURS, ABSCESS
 - SPINAL CORD CAUSES: MULTIPLE SCLEROSIS, SPINAL CORD TUMOUR/ABSCESS, ALS
 - PNS CAUSE: OTHER NEUROPATHIES
 - NEUROMUSCULAR JUNCTION: MYASTHENIA GRAVIS, EATON-LAMBERT SYNDROME
 - MYOPATHY: MUSCULAR DYSTROPHY, POLYMYOSITIS/DERMATOMYOSITIS, CUSHING'S

58. NUMBNESS AND TINGLING

- **ESSENTIAL**
 - UPPER AND LOWER EXTREMITY NERVE ROOT DISTRIBUTIONS
 - CNS/BRAIN STEM CAUSES: TRANSIENT ISCHEMIC ATTACKS
 - SPINAL CORD CAUSES: B12 DEFICIENCY
 - PNS CAUSES: AIDP (GUILLAIN-BARRE SYNDROME), DIABETIC (SEE 53)/ALCOHOLIC NEUROPATHY (SEE 76)
- **SECONDARY**
 - SPINAL CORD COMPRESSION FROM METASTASES, TUMOUR, ABSCESS, HEMATOMA, DISC HERNIATION
 - OTHER NEUROPATHIES

60. SPEECH AND LANGUAGE DISTURBANCES

60A HEMIPLEGIA/HEMISENSORY LOSS □ APHASIA

- **ESSENTIAL**
 - CEREBROVASCULAR ACCIDENT
- **SECONDARY**
 - CNS TUMOR/ABSCESS

61. INVOLUNTARY MOVEMENTS

- **ESSENTIAL**
 - PARKINSON'S DISEASE, ALCOHOL WITHDRAWAL (SEE 76), HYPERTHYROID (SEE 48)
- **SECONDARY**
 - CEREBELLAR DISORDERS, TICS AND CHOREA

62. GAIT DISTURBANCES (ATAXIA)

- **ESSENTIAL**
 - ALCOHOL INDUCED CEREBELLAR ATROPHY, PARKINSON'S DISEASE
- **SECONDARY**
 - OTHER CEREBELLAR DISORDERS, SPASTICITY POST-CEREBROVASCULAR ACCIDENT

NEUROSCIENCES - PART II

63. DIZZINESS AND VERTIGO

- **ESSENTIAL**
 - VERTEBROBASILAR (BRAINSTEM) OR CEREBELLAR CEREBROVASCULAR ACCIDENTS
- **SECONDARY**
 - MULTIPLE SCLEROSIS, INNER EAR DISEASES (MENIERE'S)

65. VISION LOSS

65B ACUTE VISION LOSS

- **ESSENTIAL**
 - TRANSIENT ISCHEMIC ATTACKS, TEMPORAL ARTERITIS

67. DIPLOPIA

67A DIPLOPIA

- **ESSENTIAL**
 - BRAIN STEM CEREBROVASCULAR ACCIDENT
- **SECONDARY**
 - BRAIN TUMOURS, MYASTHENIA GRAVIS

68. COMA (IMPAIRED CONSCIOUSNESS) AND ACUTE CONFUSION (DELIRIUM)

- **ESSENTIAL**
 - CAUSES 'OUT OF THE BRAIN'
 - SUBSTRATE DEFICIENCIES: HYPOXIA (SEE 30), THIAMINE (SEE 76), HYPOGLYCEMIA (SEE 53), ANEMIA (SEE 06)
 - MAJOR ORGAN FAILURE: RENAL FAILURE (SEE 34), CIRRHOSIS/ENCEPHALOPATHY, CHF
 - ELECTROLYTE ABNORMALITIES: SODIUM (SEE 37), CALCIUM (SEE 54), ACIDOSIS (SEE 31)
 - ALCOHOL INTOXICATION/WITHDRAWAL (SEE 76)
 - ENDOCRINE: HYPOTHYROID (SEE 48B), ADDISON'S
 - HYPERTENSIVE ENCEPHALOPATHY (SEE 39)
 - SEPSIS (SEE 03)
 - CAUSES 'IN THE BRAIN'
 - CEREBROVASCULAR ACCIDENTS, MENINGITIS/ENCEPHALITIS, SEIZURES/POST-ICTAL STATE (SEE 70)
- **SECONDARY**
 - CAUSES 'OUT OF THE BRAIN'
 - SUBSTRATE DEFICIENCY: HYPOPHOSPHATEMIA
 - ELECTROLYTE ABNORMALITIES: MAGNESIUM
 - ENDOCRINE: HYPOPITUITARISM, CUSHING'S
 - CAUSES 'IN THE BRAIN'
 - TRAUMA/SUBDURAL HEMATOMA

70. SEIZURES

70A SEIZURES IN ADULT/STATUS EPILEPTICUS

- **ESSENTIAL**
 - GENERALIZED SEIZURES
 - PRIMARY EPILEPSY
 - SECONDARY CAUSES
 - CNS: CEREBROVASCULAR ACCIDENTS, MENINGITIS/ENCEPHALITIS
 - METABOLIC: HYPO/HYPERNATREMIA (SEE 37), HYPOCALCEMIA (SEE 54B), HYPOGLYCEMIA (SEE 53)
 - ALCOHOL INTOXICATION AND WITHDRAWAL (SEE 76)
- SECONDARY
 - PARTIAL SEIZURES, ABSENCE SEIZURES, PSEUDOSEIZURES
 - GENERALIZED SEIZURES: HYPOMAGNESEMIA

72. DEMENTIA, MEMORY DISTURBANCES (OTHER COGNITIVE CHANGES)

- **ESSENTIAL**
 - IRREVERSIBLE CAUSES
 - ALZHEIMER'S, PARKINSON'S
 - REVERSIBLE CAUSES
 - HIV, ALCOHOL (THIAMINE), NORMAL PRESSURE HYDROCEPHALUS, HYPOTHYROIDISM (SEE 48B), SODIUM/CALCIUM DISTURBANCES (SEE 37,54), MAJOR ORGAN FAILURE
- SECONDARY
 - IRREVERSIBLE CAUSES
 - MULTI-INFARCT, CREUTZFELD-JACOB AND PICK'S DISEASE,
 - REVERSIBLE CAUSES
 - SYPHILIS, BRAIN TUMORS/ABSCCESS, SUBDURAL HEMATOMA, FOLATE/NIACIN DEFICIENCY, WILSON'S DISEASE

74. HEADACHES

- **ESSENTIAL**
 - CLINICAL SIGNS OF WORRISOME (BLEEDS, RAISED ICP) HEADACHE
 - INTRACRANIAL HEMORRHAGE, TEMPORAL ARTERITIS
- SECONDARY
 - TENSION HEADACHES
 - MIGRAINE AND OTHER VASCULAR HEADACHES
 - BRAIN TUMOURS
 - REFERRED PAIN

76. SUBSTANCE ABUSE

- **ESSENTIAL**
 - ALCOHOLISM AND ITS MULTISYSTEM DETRIMENTAL EFFECTS

GASTROINTESTINAL

83. WEIGHT LOSS

- **ESSENTIAL**
 - DECREASED INTAKE CAUSES
 - PEPTIC ULCER DISEASE, INFLAMMATORY BOWEL DISEASE
 - INCREASED METABOLISM
 - HIV, HYPERTHYROIDISM (SEE 48A)
 - LOSS OF NUTRIENTS
 - DIABETES MELLITUS
- **SECONDARY**
 - OTHER CAUSES OF DECREASED INTAKE
 - MALABSORPTION
 - HYPERMETABOLISM FROM UNDERLYING MALIGNANCY

94. DIFFICULTY SWALLOWING/DYSPHAGIA

- **SECONDARY**
 - REFLUX-INDUCED STRICTURE, ESOPHAGEAL CANCER, ACHALASIA, SCLERODERMA

95. ABDOMINAL PAIN

95A ACUTE ABDOMINAL PAIN

- **ESSENTIAL**
 - CARDIORESPIRATORY CAUSES: PULMONARY EMBOLUS, MI, PNEUMONIA
 - GASTROINTESTINAL CAUSES:
 - ACUTE PANCREATITIS, PEPTIC ULCER DISEASE, ACUTE HEPATITIS, PEPTIC ULCER DISEASE, INFLAMMATORY BOWEL DISEASE, IRRITABLE BOWEL SYNDROME
 - METABOLIC CAUSES: DKA
 - URINARY CAUSES: UTI/PYELO
- **SECONDARY**
 - GASTROINTESTINAL CAUSES: 'SURGICAL' CAUSES, ABDOMINAL MALIGNANCY
 - METABOLIC CAUSES: SICKLE CELL, HENOCHE-SCHONLEIN PURPURA
 - GENITOURINARY CAUSES: KIDNEY STONES ALL GYNE CAUSES

95B CHRONIC ABDOMINAL PAIN

- **ESSENTIAL**
 - CARDIORESPIRATORY CAUSES: ANGINA, RECURRENT PULMONARY EMBOLUS
 - GASTROINTESTINAL CAUSES: PEPTIC ULCER DISEASE, INFLAMMATORY BOWEL DISEASE, IRRITABLE BOWEL SYNDROME
- **SECONDARY**
 - GASTROINTESTINAL CAUSES: ESOPHAGITIS, ABDOMINAL MALIGNANCY, BILIARY COLIC, CHRONIC PANCREATITIS
 - ALL GENITOURINARY CAUSES

96. HEMATEMESIS

- **ESSENTIAL**
 - PEPTIC ULCER DISEASE, CIRRHOSIS WITH VARICES
- **SECONDARY**
 - ESOPHAGITIS, UPPER GI CANCER, MALLORY-WEISS TEAR, AORTO-ENTERIC FISTULA

97. BLOOD IN STOOL

- **ESSENTIAL**
 - INFLAMMATORY BOWEL, BRISK UPPER GI BLEEDING, HEMOLYTIC-UREMIC SYNDROME
- **SECONDARY**
 - INFECTIOUS COLITIS, DIVERTICULAR DISEASE, ANGIODYSPLASIA, COLON CANCER, HENOCHE-SCHONLEIN PURPURA

98. HEARTBURN (VOMITING/NAUSEA/ANOREXIA/INDIGESTION)

- **ESSENTIAL**
 - ANGINA/MYOCARDIAL INFARCTION

- GASTROINTESTINAL CAUSES: PEPTIC ULCER DISEASE, INFLAMMATORY BOWEL
- METABOLIC CAUSES OF NAUSEA AND VOMITING: ADDISON'S, RENAL FAILURE (SEE 34, 44), HYPOTHYROID (SEE 48B), DIABETES MELLITUS (SEE 53), HYPERCALCEMIA (SEE 54A)
- SECONDARY
 - GASTROINTESTINAL CAUSES: ESOPHAGITIS BILIARY COLIC, CHRONIC PANCREATITIS, ABDOMINAL MALIGNANCY
 - NAUSEA FROM RAISED INTRACRANIAL PRESSURE

99. ABDOMINAL DISTENSION/MASS/VISCEROMEGALY/ASCITES

- **ESSENTIAL**
 - HIGH ALBUMIN GRADIENT CAUSES: CIRRHOSIS (PORTAL HYPERTENSION), NEPHROTIC SYNDROME, CONGESTIVE HEART FAILURE/RIGHT HEART FAILURE/ PERICARDIAL DISEASE
- SECONDARY
 - HIGH ALBUMIN GRADIENT CAUSES: BUDD-CHIARI, TRICUSPID REGURGITATION,
 - LOW ALBUMIN GRADIENT CAUSES: PERITONEAL CARCINOMATOSIS (97%), PERITONEAL TUBERCULOSIS, PERITONEAL FUNGAL INFECTION, CHYLOUS ASCITES, PANCREATITIS
 - CAUSES OF:
 - CONSTIPATION/BLOATING
 - HEPATOMEGALY
 - SPLENOMEGALY (SEE 12)

100. JAUNDICE/ABNORMAL LIVER ENZYMES

- **ESSENTIAL**
 - JAUNDICE
 - PREHEPATIC CAUSES: HEMOLYSIS
 - HEPATIC CAUSES: ACUTE VIRAL HEPATITIS (ESP. B AND C), CIRRHOSIS, ACUTE ALCOHOLIC HEPATITIS (SEE 76)
 - ELEVATED LIVER ENZYMES
 - CHRONIC LIVER DISEASE, HEPATOCELLULAR PICTURE
 - HEPATITIS B AND C
 - HEMOCHROMATOSIS
 - CHRONIC LIVER DISEASE, CHOLESTATIC PICTURE
 - ALCOHOL (SEE 76)
 - PRIMARY BILIARY CIRRHOSIS
- SECONDARY
 - JAUNDICE:
 - PREHEPATIC CAUSES: GILBERT'S
 - HEPATIC CAUSES: ACUTE DRUG-INDUCED HEPATITIS, ISCHEMIC HEPATITIS (SHOCK LIVER)
 - POST HEPATIC CAUSES: STONES, MALIGNANCIES (PANCREATIC, AMPULLARY, CHOLANGIOCARCINOMA)
 - ELEVATED LIVER ENZYMES
 - CHRONIC LIVER DISEASES, HEPATOCELLULAR PICTURE
 - ALPHA1ANTITRYPSIN DEFICIENCY, WILSON'S DISEASE, AUTOIMMUNE HEPATITIS
 - CHRONIC LIVER DISEASES, CHOLESTATIC PICTURE
 - PRIMARY SCLEROSING CHOLANGITIS, INFILTRATION (FAT, AMYLOID, GRANULOMAS, MALIGNANCY)

101. CHANGE IN BOWEL HABIT

- **ESSENTIAL**
 - CAUSES OF CHRONIC DIARRHEA
 - ULCERATIVE COLITIS, CROHN'S DISEASE, IRRITABLE BOWEL SYNDROME
 - CAUSES OF ACUTE DIARRHEA
 - INFECTIONS
 - HEMOLYTIC-UREMIC SYNDROME
 - INFLAMMATORY
 - ULCERATIVE COLITIS, CROHN'S DISEASE
- SECONDARY

- CAUSES OF CHRONIC DIARRHEA
 - CELIAC DISEASE
- CAUSES OF ACUTE DIARRHEA
 - LARGE BOWEL PREDOMINANT ORGANISMS
 - SHIGELLA, CAMPYLOBACTER, E.COLI 0157, ENTAMOEBA HISTOLYTICA
 - CLOSTRIDIUM DIFFICILE
 - SMALL BOWEL PREDOMINANT ORGANISMS:
 - VIRUSES, SALMONELLA, YERSINIA, TOXIGENIC E.COLI (TRAVELLERS),GIARDIA

Table 1: Summary of the Essential Internal Medicine Diagnoses/Syndromes

DIAGNOSIS/SYNDROME	CLINICAL PRESENTATION(S)
MENINGITIS	03, 69, 71, 70
ENCEPHALITIS	03, 69, 71, 70
PNEUMONIA	03, 29B, 30, 32, 95A
TUBERCULOSIS	03, 06, 07, 12, 29D, 99
HIV	03, 11, 12, 72, 83
ENDOCARDITIS	03, 26, 34, 42B
UTI	03, 41, 42A, 95A
SEPTIC JOINT	03, 18
HODGKIN'S DISEASE	03, 07, 11, 12
NON-HODGKIN'S LYMPHOMA	03, 07, 11, 12
ALL	03, 07, 10, 12, 40B
AML	03, 07, 10, 12, 40B
LUNG CARCINOMA	03, 09B, 29D, 30, 32, 54A
SLE	03, 06, 11, 12, 18, 19, 29C, 34, 42B, 43, 44
RA	03, 11, 12, 18, 19, 29B
SARCOIDOSIS	03, 11, 12, 29B, 42B, 43, 44, 54A
CROHN'S DISEASE	03, 09B, 83, 95, 97, 98, 101
ULCERATIVE COLITIS	03, 09B, 83, 95, 97, 98, 101
IRON DEFICIENCY ANEMIA	06
ANEMIA OF CHRONIC DISEASE	06
BONE MARROW FAILURE	06, 07
MULTIPLE MYELOMA	06, 34, 42B, 43, 44, 54A
HEMOLYSIS	06, 12, 40B, 100
B12 DEFICIENCY	06, 57, 58
DIC	07
TTP	07, 34, 42B
HUS	07, 34, 42B, 97, 101
ITP	07
CIRRHOSIS	07, 29C, 36, 37, 69, 71, 96, 99, 100
DVT/PE	09A, 23, 26, 29A, 30, 32, 34, 95A
NEPHROTIC SYNDROME	09B, 29C, 36, 37, 43, 49, 99
GOUT/PSEUDOGOUT	18, 34, 42B, 43, 44
REACTIVE ARTHRITIS	18, 19
OSTEOARTHRITIS	19
POLYMYALGIA RHEUMATICA/ARTERITIS	20, 64, 74
ANGINA/MI	23, 26, 29A, 34, 95, 98
AORTIC DISSECTION	23, 26, 34
PERICARDITIS/TAMPONADE	23, 26, 29A, 30, 34, 99
PLEURAL EFFUSION	23, 29C, 30
PNEUMOTHORAX	23, 26, 29C, 30, 34
STROKE/TIA	24, 57, 58, 60, 63, 65, 67, 69, 71, 70, 74
AORTIC STENOSIS	24, 28A
HEART BLOCKS	24
ATRIAL FIBRILLATION	24, 25
VENTRICULAR TACHYCARDIA	24, 25
DIABETES/HYPOGLYCEMIA/DKA	24, 31A, 38, 40B, 43, 44, 49, 53, 57, 58, 69, 71, 70, 3, 95A, 98
PANCREATITIS	26, 29C, 34, 54B, 95A
MITRAL REGURGITATION	28A
MITRAL STENOSIS	28B
AORTIC REGURGITATION	28B
PULMONARY EDEMA/CHF	29B, 30, 32, 36, 37, 69, 71, 99

ASTHMA	29A, 30
COPD	29A, 30, 32
INTERSTITIAL LUNG DISEASE	29B, 30
HYPERTHYROIDISM/GRAVE'S	29A, 48A, 57, 61, 83
HYPOTHYROIDISM/HASHIMOTO'S	36, 48B, 49, 57, 69, 71, 72, 98
SALICYLATE OVERDOSE	31A, 69, 71
ACUTE TUBULAR NECROSIS	34
ACUTE INTERSTITIAL NEPHRITIS	34
RHABDOMYOLYSIS	34, 40B
SIADH	37, 69, 71, 70, 72
PRIMARY HYPERTENSION	39, 42B, 43, 44, 69, 71
ALCOHOL ABUSE	39, 49, 57, 58, 61, 62, 69, 71, 70, 72, 76, 100
ADDISON'S	40B, 98
PRIMARY BILIARY CIRRHOSIS	49, 100
HEMOCHROMATOSIS	53, 100
HYPERPARATHYROIDISM	54A, 57, 69, 71, 72, 98
HYPOPARATHYROIDISM	54B, 70
GUILLAIN-BARRE SYNDROME	57, 58
PARKINSON'S DISEASE	61, 62, 72
PRIMARY EPILEPSY	69, 70, 71
ALZHEIMER'S	72
NORMAL PRESSURE HYDROCEPHALUS	62, 72
PEPTIC ULCER DISEASE	83, 95, 96, 97, 98
ACUTE/CHRONIC HEPATITIS B	95, 100
ACUTE/CHRONIC HEPATITIS C	95, 100
IRRITABLE BOWEL SYNDROME	95, 101

Pharmacology and Therapeutics

At the end of the eight-week clerkship, the clerk will be able to use the following medication classes and recognise their indications, contraindications, drug interactions, monitoring common and important side effects as well as special metabolic circumstances such as the elderly, pediatrics, liver and renal failure as demonstrated by participation in the Wednesday Learning Session and the successful completion of the summative written examination.

Table 2: Important Pharmacological agents and their side-effects

PHARMACOLOGICAL CLASS	CLINICAL PRESENTATION INVOLVED IN SIDE-EFFECT	COMMENTS
GENERAL S/E OF potentially ALL DRUG CLASSES	03, 13 06(BONE MARROW) 10, 11, 12, 26 (ALLERGY/ANAPHYLAXIS) 57 (NEUROPATHY) 98, 100, 101	
ANTIBIOTICS	34, 42B, 63	-ATN, VERTIGO:AMINOGLYCOSIDES -INTERSTITIAL NEPHRITIS: essentially all other classes
BETA BLOCKERS	24, 29B, 57	-DYSPNEA: EXACERBATION OF COPD/CHF
NITRATES	24, 74	
ACE INHIBITORS/ARB	24, 29A, 34, 36 (ANGIOEDEMA), 40B	-PRERENAL FAILURE ONLY WITH BILATERAL RENAL ARTERY STENOSIS
DIURETICS	24, 34, 36, 37, 40A/B, 49	-RENAL FAILURE: PRE-RENAL/ INTERSTITIAL - HYPONATREMIA: ESPECIALLY THIAZIDES
CALCIUM CHANNEL BLOCKERS	24	
DIGOXIN	98	
ANALGESICS: ACETAMINOPHEN,OPIOIDS	30, 61, 69, 71	-INVOLUNTARY MOVEMENTS: OPIOID WITHDRAWAL
NSAIDS	07, 34, 42B, 95, 96, 97	-RENAL FAILURE: VASCULAR EFFECT/INTERSTITIAL
ANTICOAGULANTS: ASA, HEPARIN,COUMADIN	07, 95, 96, 97	-ABDOMINAL PAIN: ASA-INDUCED ULCER
BENZODIAZEPINES	30, 61, 69, 71	-INVOLUNTARY MOVEMENTS: BENZO WITHDRAWAL
BRONCHODILATORS	25	
CORTICOSTEROID THERAPY	07, 10, 39, 53, 57	-WEAKNESS: PROXIMAL MYOPATHY
DIABETES THERAPY: ORAL HYPOGLYCEMICS,INSULIN	31A	
PEPTIC ULCER THERAPY:		

NOTABLE DIAGNOSES NOT DEEMED 'ESSENTIAL':- PSORIATIC ARTHRITIS, GRANULOMATOSIS WITH POLYANGITIS (WEGENER'S), ANTI-GBM DISEASE (GOODPASTURE'S), METHANOL OVERDOSE, CONN'S, CUSHINGS, PHEO, SCLERODERMA, POST STREP, POLYARTERITIS NODOSA. AMYLOIDOSIS, POLYMYOSITIS, CML. CLL, PKD

Skills Objectives

Physical Examination

At the end of the eight-week clerkship, the clerk will be able to demonstrate the following clinical skills as shown by successful in-training performance evaluation reports.

IMPORTANT SKILLS TO DEMONSTRATE DURING THE MEDICINE ROTATION

1. Assess a patient's volume status.
2. Interpret vital signs.
3. Demonstrate correct technique for determining blood pressure.
4. Properly examine the fundus for diabetes, hypertension, and raised intracranial pressure.
5. Examine the thyroid. Assess thyroid function clinically.
6. Interpret jugular venous pulse.
7. Examine for signs of congestive heart failure and pericardial tamponade.
8. Examine the heart and interpret cause of murmur.
9. Examine for peripheral arterial disease.
10. Examine for the most reliable signs of:
 - i. pleural effusion;
 - ii. consolidation;
 - iii. airway obstruction;
 - iv. loss of volume;
 - v. clubbing.
11. Examine the liver. Identify signs of liver disease.
12. Examine for the presence of ascites.
13. Examine for splenomegaly.
14. Examine for lymphadenopathy.
15. Perform a digital rectal examination.
16. Examine the breasts for evidence of cancer.
17. Examine the prostate and testicles for evidence of cancer or BPH.
18. Demonstrate examination of hands, knees, hips, and feet, and findings of rheumatoid arthritis.
19. Differentiate septic arthritis from osteoarthritis and rheumatoid arthritis.
20. Differentiate upper motor neuron findings from lower motor neuron findings.
21. By history and physical findings, localise a lesion to:
 - i. cerebral hemisphere;
 - ii. brainstem;
 - iii. spinal cord;
 - iv. root or peripheral nerve
22. Perform a general screen for the musculoskeletal system (GALS).

Medical Procedures and Tests

At the end of the eight-week clerkship, the clerk will be able to, where appropriate, interpret the following procedures and tests as demonstrated by active participation in Friday Teaching Rounds, summative written examination, and the in-training performance evaluation reports. Opportunities to perform certain procedures may be limited and not expected on this rotation. However, if you are keen to observe or participate in performing procedures, please ensure you inform your supervising residents and staff so they can try to include you in any bedside procedures that may be required for your patients.

1. Arterial blood gas - *Interpret*

2. Urinalysis (microscopic) - *Interpret patterns of:*
 - i. glomerulonephritis;
 - ii. pyelonephritis;
 - iii. hematuria;
 - iv. pyuria;
 - v. proteinuria;
 - vi. crystals.
3. ECG
 - i. ischemia changes;
 - ii. supraventricular tachycardias;
 - iii. ventricular arrhythmias;
 - iv. heart block;
 - v. hyperkalemia.
5. Basic Radiology - *Interpret*
 - i. chest x-ray (pneumonia, pulmonary edema, COPD, interstitial infiltrates, nodules, pleural effusions);
 - ii. abdominal - three views (bowel obstruction, perforation);
 - iii. spine/pelvis x-rays (osteoporosis, metabolic and metastatic bone disease).
 - i. Thoracentesis/Paracentesis transudates;
 - ii. exudates.
4. Basic Spirometry – *Interpret*
5. Peripheral Blood Smear – *Interpret*
6. Fecal Occult Blood Testing
7. *Pleural, peritoneal, joint fluid - Interpret*

Medical Charting

At the end of the eight-week clerkship, the clerk will be able to demonstrate accurate, complete, clear, and insightful medical records as shown by successful completion of the in-training performance evaluation reports.

The medical chart is a legal document and patient information must be kept confidential. It is important to complete all of your day's charting in a timely fashion (ideally before the end of the workday) as other team members are required to Attest/Sign your notes. With respect to electronic medical records, we expect clerks to write original notes rather than relying on "cut and paste" function.