Block Q MCQs Presentations

Ischemic stroke

- Sudden onset neurological deficit
- Weakness or numbness of face/arm/leg (usually unilateral)
- Speech disturbance
- Visual loss
- Gait instability
- 📌 Sudden + focal = stroke

Middle cerebral artery (MCA)

- Contralateral face & arm weakness > leg
- Aphasia (dominant hemisphere)
- Hemineglect (non-dominant hemisphere)
- Contralateral sensory loss
- Homonymous hemianopia
- 📌 Face/arm affected + aphasia = MCA

Anterior cerebral artery (ACA)

- Contralateral leg weakness > arm
- Behavioral changes
- Urinary incontinence
- Abulia
- 📌 Leg weakness + personality change = ACA

Posterior cerebral artery (PCA)

- Contralateral homonymous hemianopia
- Visual agnosia
- Memory impairment
- Macular sparing
- 📌 Sudden visual loss = PCA

Vertebrobasilar stroke (brainstem)

- Dizziness / vertigo
- Dysphagia
- Dysarthria
- Diplopia
- Ataxia
- 📌 D's of brainstem stroke

Lateral medullary (Wallenberg) syndrome

- Dysphagia, hoarseness
- Loss of pain & temperature: Ipsilateral face, Contralateral body

- Ataxia
- Horner syndrome
- 📌 PICA lesion

Medial medullary syndrome
- Contralateral spastic paralysis
- Loss of proprioception
- Ipsilateral tongue deviation
- 📌 Dejerine syndrome

LACUNAR STROKES (small vessel disease)
- Pure motor stroke - Contralateral weakness, No sensory loss
- Pure sensory stroke - Contralateral sensory loss
- Ataxic hemiparesis - Weakness + ataxia
- 📌 HTN + small vessel = lacunar

CARDIOEMBOLIC STROKE
- Sudden, severe deficit
- History of atrial fibrillation
- Multiple vascular territories involved
- 📌 AF + stroke = embolic

HIPPOCAMPUS
- Anterograde amnesia
- Inability to form new memories
- Old memories relatively preserved
- Patient is alert but forgets recent events
- 📌 Cannot remember what happened 5 minutes ago

THALAMUS
- Contralateral loss of all sensory modalities - pain, temperature, touch, proprioception
- No motor weakness
- Consciousness preserved
- 📌 Pure sensory deficit = thalamus

INTERNAL CAPSULE
- Typical lesion: lacunar infarct (HTN, diabetes)
- Pure motor stroke
- Contralateral hemiplegia
- No cortical signs
- Dense weakness of face + arm + leg = internal capsule

TRANSIENT ISCHEMIC ATTACK (TIA)

- Stroke-like symptoms
- Complete resolution < 24 hours (often <1 hr)
- Warning sign for stroke
- 📌 Symptoms resolved = TIA

Rapid MCQ recognition rules
- Sudden focal deficit → ischemic stroke
- Face/arm > leg → MCA
- Leg > arm → ACA
- Visual loss → PCA
- Brainstem signs → vertebrobasilar
- AF → embolic stroke
- Pure motor/sensory → lacunar

General presenting features of Hemorrhagic Stroke
- Sudden severe headache
- Rapidly worsening neurological deficit
- Vomiting
- Decreased level of consciousness
- Seizures (more common than ischemic stroke)
- 📌 Headache + vomiting = hemorrhage

SUBARACHNOID HEMORRHAGE (SAH)
- Sudden onset “worst headache of life”
- Thunderclap headache
- Neck stiffness
- Photophobia
- Vomiting
- Loss of consciousness
- 📌 Worst headache ever = SAH

Focal (Partial) seizures
- Origin: single cerebral hemisphere

Focal aware (simple partial)
- Motor: unilateral twitching
- Sensory: tingling, aura, visual hallucinations
- Autonomic: sweating, palpitations
- Psychic: déjà vu, fear
- Lasts seconds → 1–2 min

Focal impaired awareness (complex partial)
- Altered consciousness
- Automatisms: lip smacking, fumbling hands
- Postictal confusion common
- Often temporal lobe origin

- 📌 MCQs: “Patient with aura → blank stare → lip smacking → postictal confusion” → temporal lobe seizure.

Generalized seizures
- Bilateral hemisphere involvement from onset

Tonic-clonic (grand mal)
- Sudden loss of consciousness
- Tonic phase: stiffening
- Clonic phase: rhythmic jerking
- Postictal confusion, fatigue
- Tongue bite, incontinence may occur
- 📌 Classic “loss of consciousness + stiffening + jerking + postictal confusion”

Absence (petit mal)
- Brief LOC (seconds)
- Staring, eye fluttering
- No postictal confusion
- Common in children
- Provoked by hyperventilation in exams
- 📌 “Child stops activity for 10 seconds, unaware, resumes immediately” → absence seizure

Myoclonic
- Sudden, brief jerks of limbs or body
- Often morning in juvenile myoclonic epilepsy
- No LOC or brief impairment

Atonic (drop attacks)
- Sudden loss of muscle tone
- Falls suddenly, may injure head

Febrile seizures (children)
- Age 6 months – 5 years
- Fever >38°C without CNS infection
- Generalized tonic-clonic, <15 min
- Usually self-limited
- 📌 “6-year-old with fever → generalized tonic-clonic <15 min → normal neuro exam”

STATUS EPILEPTICUS
- Seizure >5 min or recurrent seizures without regaining consciousness
- Medical emergency
- Causes: AED withdrawal, CNS infection, stroke
- Symptoms: persistent convulsions, autonomic instability

EEG AND IMAGING CLUES

- Focal spikes → focal seizure
- Generalized 3 Hz spike-wave → absence seizure
- MRI: hippocampal sclerosis → temporal lobe epilepsy
- EEG normal interictally in some patients

MCQ HIGH-YIELD TRIGGERS

- Sleep deprivation → generalized seizures
- Hyperventilation → absence seizures
- Photosensitivity → juvenile myoclonic epilepsy
- Alcohol withdrawal → tonic-clonic
- Staring in child → absence seizure
- Tonic-clonic + postictal confusion → generalized seizure
- Lip-smacking + aura → temporal lobe seizure
- Brief limb jerks in morning → juvenile myoclonic epilepsy
- Fever in toddler → febrile seizure
- >5 min seizure → status epilepticus

MIGRAINE

- Young adult (often female)
- Unilateral, throbbing headache
- Moderate to severe intensity
- Photophobia + phonophobia
- Nausea / vomiting
- Worse with routine activity
- Relieved by sleep
- Visual aura: zig-zag lines, flashing lights
- Sensory aura: tingling
- Aura lasts 5–60 min, followed by headache
- 📌 Unilateral throbbing + photophobia = migraine

TENSION-TYPE HEADACHE

- Bilateral, band-like pressure
- Dull, tight sensation
- Mild–moderate
- No nausea/vomiting
- Not worsened by activity
- Associated with stress
- 📌 Band-like tightness = tension headache

CLUSTER HEADACHE

- Middle-aged male
- Severe unilateral periorbital pain

- Lasts 15–180 minutes
- Occurs in clusters (same time daily)
- Autonomic symptoms: lacrimation, rhinorrhea, ptosis, miosis
- 📌 Unilateral eye pain + tearing = cluster headache

TEMPORAL ARTERITIS (GCA)
- Age >50
- New-onset temporal headache
- Scalp tenderness
- Jaw claudication
- Visual symptoms
- 📌 Elderly + temporal pain + jaw claudication

TRIGEMINAL NEURALGIA
- Sudden, sharp, electric-shock pain
- One side of face
- Triggered by chewing, touch
- 📌 Electric shock facial pain

MULTIPLE SCLEROSIS — Typical MCQ Presentations
- Young adult (20–40 yrs)
- Female > male
- Relapsing–remitting course
- Symptoms separated in time and space
- 📌 Neurological deficits that come and go = MS

DEMENTIA
- Chronic, progressive decline in cognition
- Clear consciousness (unlike delirium)
- Impairs daily functioning
- Usually irreversible (except few causes)
- 📌 Progressive memory loss with intact alertness = dementia

ALZHEIMER DISEASE
- Elderly patient (>65)
- Gradual, progressive memory loss
- Early: Forgetting recent events, Misplacing objects
- Later: Language difficulty (aphasia), Apraxia, Agnosia
- 📌 Insidious onset + progressive decline = Alzheimer

VASCULAR DEMENTIA
- History of stroke / hypertension
- Stepwise deterioration
- Focal neurological deficits present

- Gait disturbance early
- 📌 Stepwise decline + focal signs = vascular dementia

DEMENTIA WITH LEWY BODIES
- Fluctuating cognition
- Visual hallucinations
- Parkinsonism (rigidity, bradykinesia)
- Sensitivity to antipsychotics
- 📌 Hallucinations + Parkinsonism = Lewy body dementia

FRONTOTEMPORAL DEMENTIA (PICK'S DISEASE)
- Younger onset (50–60 yrs)
- Early personality & behavior changes
- Disinhibition
- Loss of empathy
- Hyperorality
- 📌 Behavior change before memory loss

NORMAL PRESSURE HYDROCEPHALUS
- Gait disturbance (magnetic gait)
- Urinary incontinence
- Dementia
- 📌 Wet, wobbly, wacky

CREUTZFELDT–JAKOB DISEASE
- Rapidly progressive dementia
- Myoclonus
- Ataxia
- Death within months
- 📌 Rapid dementia + myoclonus

PARKINSON DISEASE
- Elderly patient (usually >60 years)
- Progressive neurodegenerative disorder
- Due to loss of dopaminergic neurons in substantia nigra
- Symptoms start asymmetrically
- 📌 Asymmetric onset + movement disorder = Parkinson disease

ONE-LINE MCQ STEMS TO RECOGNIZE Parkinson
- "Elderly with resting pill-rolling tremor and rigidity"
- "Masked face, shuffling gait, reduced arm swing"
- "Difficulty initiating movements, stooped posture"
- "Asymmetric onset of tremor and bradykinesia"

PATHOLOGY & IMAGING CLUES Parkinson

- Lewy bodies (α-synuclein)
- Loss of pigmented neurons in substantia nigra

HUNTINGTON DISEASE

- Autosomal dominant
- Onset 30–50 years
- Progressive, irreversible
- Due to degeneration of caudate nucleus & putamen
- CAG trinucleotide repeat (chromosome 4)
- Anticipation (earlier & worse in next generation)
- 📌 Middle-aged patient + movement + psychiatric + cognitive symptoms

EXAM-FAVORITE PRESENTATIONS for Huntington

- “45-year-old with involuntary movements, depression, family history”
- “Middle-aged patient with chorea and progressive dementia”
- “Father had similar illness, patient presenting earlier”
- 📌 Family history + anticipation

MENINGITIS

- Inflammation of meninges
- Acute onset
- Medical emergency
- Can be infectious or non-infectious
- 📌 Fever + headache + neck stiffness = meningitis

MENINGITIS CLASSIC TRIAD

- Fever
- Neck stiffness
- Altered mental status
- 📌 Triad present → meningitis until proven otherwise

COMMON PRESENTING SYMPTOMS MENINGITIS

- Severe headache
- Photophobia
- Nausea / vomiting
- Confusion
- Seizures (especially in bacterial meningitis)
- Rash (meningococcal)

MENINGEAL SIGNS

- Kernig sign – pain on knee extension
- Brudzinski sign – hip/knee flexion on neck flexion
- Nuchal rigidity

- 📌 Positive meningeal signs = meningeal irritation

ACUTE BACTERIAL MENINGITIS

- Sudden onset
- High-grade fever
- Severe headache
- Altered consciousness
- Seizures
- Vomiting
- Petechial rash → Neisseria meningitidis
- 📌 Toxic patient + rapid progression

VIRAL (ASEPTIC) MENINGITIS

- Mild to moderate illness
- Fever, headache
- Normal consciousness
- No focal deficits
- Self-limiting
- 📌 Mild meningitis + normal sensorium

TUBERCULOUS MENINGITIS

- Subacute onset (weeks)
- Low-grade fever
- Headache
- Weight loss
- Night sweats
- Cranial nerve palsies (esp. CN VI)
- 📌 Chronic symptoms + cranial nerve involvement

FUNGAL MENINGITIS

- Immunocompromised patient
- Subacute/chronic course
- Headache, fever
- Raised ICP signs
- 📌 HIV + meningitis = think fungal

MENINGOCOCCAL MENINGITIS

- Neisseria meningitis
- Fever + headache
- Purpuric / petechial rash
- Hypotension
- Shock (Waterhouse-Friderichsen syndrome)
- 📌 Rash + meningitis = meningococcal

CSF Findings

- Bacterial - Cloudy, Neutrophils, Decreased glucose
- Viral - Clear, Lymphocytes, normal glucose
- Tuberculous - Cloudy, Mixed (initually neutrophils, then lymphocytes), decreased glucose, Markedly increased protein

ACETAMINOPHEN TOXICITY

- Overdose + initial mild symptoms
- Massive transaminase elevation
- Rumack–Matthew nomogram
- Antidote: N-acetylcysteine (NAC)

Amphetamine Toxicity

- Young patient, party drug
- Excited, hyperthermic, dilated pupils
- No respiratory depression
- Treated with benzodiazepines (not beta blockers)

Cocaine Toxicity

- Chest pain + normal coronary arteries
- Nasal septum perforation (chronic use)
- Do NOT use beta blockers
- Treated with benzodiazepines + nitrates

Benzodiazepine Overdose

- Calm, sleepy patient
- Normal vital signs
- Flumazenil is antidote (⚠️ avoid in chronic users → seizures)

Organophosphate Poisoning

- Farmer / pesticide exposure
- Pinpoint pupils + copious secretions
- Low acetylcholinesterase levels
- Antidotes: Atropine + Pralidoxime

Carbon Monoxide (CO) Poisoning

- Fire exposure / faulty heater
- Cherry-red skin (rare but classic)
- Normal PaO_2 but low O_2 saturation
- Treated with 100% oxygen / hyperbaric O_2

Ethanol (Alcohol) Intoxication

- Give thiamine before glucose
- Elevated AST > ALT (2:1 ratio)

Methanol Poisoning

- Homemade alcohol ingestion
- Severe acidosis + vision loss
- Antidotes: Fomepizole or ethanol
- Hemodialysis in severe cases

SLE

- Most sensitive test → ANA
- Most specific antibody → Anti-Sm
- Antibody correlating with disease activity → Anti-dsDNA
- Most common cardiac manifestation → Pericarditis
- Renal biopsy most severe → Diffuse proliferative GN

SYSTEMIC SCLEROSIS

- Middle-aged woman (30–50 years)
- Slowly progressive skin changes
- Can present as Raynaud phenomenon first
- 📌 MCQ clue: “Female with cold-induced color changes in fingers followed by tightening of skin”

SYSTEMIC SCLEROSIS

- Sclerodactyly: thick, tight skin on fingers
- Shiny, taut skin on face and extremities
- Loss of facial expression (mask-like facies)
- Telangiectasias: small red spots, often on face and hands
- Calcinosis cutis: calcium deposits, usually fingers/elbows/knees
- Skin involvement patterns:
- Limited SSc: face, hands, forearms
- Diffuse SSc: trunk, proximal limbs
- 📌 MCQ tip: Pattern of skin involvement helps differentiate limited vs diffuse SSc

- Raynaud Phenomenon Usually first manifestation
- Tri-phasic color change: white → blue → red
- Triggered by cold or stress
- Nailfold capillary changes on exam
- 📌 MCQ clue: Young woman with episodic finger color changes → think SSc

- Non-erosive arthritis (hands, wrists)
- Flexion contractures → “claw-like” fingers
- Muscle weakness (esp. diffuse SSc, due to myopathy or fibrosis)
- 📌 Exam distinction: RA = erosive, SSc = non-erosive

- Esophagus: most commonly affected GI organ

- Small intestine: hypomotility → malabsorption, bacterial overgrowth
- Colon: constipation → pseudo-obstruction
- 📌 MCQ stem: “Dysphagia + heartburn + skin tightening” → SSc esophageal involvement

- Interstitial lung disease (ILD) → fibrosis (more in diffuse SSc)
- Pulmonary arterial hypertension (PAH) → more in limited SSc
- Symptoms: exertional dyspnea, dry cough
- 📌 High-yield:
- ILD → diffuse SSc
- PAH → limited SSc (CREST syndrome)

- Scleroderma renal crisis (SRC) - Sudden-onset malignant hypertension, Rapidly progressive renal failure, Microangiopathic hemolytic anemia (MAHA)
- More common in diffuse SSc and early disease
- 📌 MCQ clue: “Rapidly rising BP + renal failure + microangiopathic hemolysis in diffuse SSc” → SRC

High-Yield Points for Systemic Sclerosis
- First manifestation: Raynaud phenomenon
- Skin thickening pattern: limited vs diffuse
- CREST features
- Organ complications: renal crisis, ILD, PAH
- Autoantibodies: anti-centromere, anti-Scl-70, anti-RNA polymerase III
- MCQs often ask: pattern recognition + antibody correlation + complication

Giant Cell Arteritis (GCA)
- Age: usually >50 years (most commonly 70s)
- Gender: Female > Male (2–3:1)
- Often associated with Polymyalgia Rheumatica (PMR)
- 📌 MCQ clue: “70-year-old woman with headache + jaw pain + elevated ESR”
- 📌 MCQ stem: “Sudden, painless monocular vision loss in elderly woman → GCA”
- 📌 MCQ tip: Systemic symptoms + cranial symptoms in >50 y/o → think GCA
- 📌 MCQ clue: “Shoulder and hip stiffness + elevated ESR + new headache” → GCA with PMR
- Most feared complication of GCA” → blindness

POLY ARTERITIS NODOSA (PAN)
- No pulmonary involvement → differentiates from microscopic polyangiitis or granulomatosis with polyangiitis (GPA)
- Hepatitis B antigen positive in subset
- ESR and CRP elevated
- Angiography: “microaneurysms of medium-sized arteries” → classic radiological finding
- Mononeuritis multiplex + livedo + abdominal pain → classic triad for PAN

- Adult male + systemic symptoms + neuropathy + livedo reticularis → PAN
- Hypertension + renal ischemia + no hematuria → PAN
- Abdominal pain + weight loss + fever + microaneurysms on angiography → PAN
- No lung involvement (helps differentiate from small-vessel ANCA vasculitis)

Pre-hepatic (Hemolytic) Jaundice

- ↑ bilirubin production, liver normal
- Young patient with anemia
- Mild jaundice, no itching
- Dark stool, normal-colored urine
- History of: Malaria, G6PD deficiency (triggered by drugs/infection), Sickle cell disease, Autoimmune hemolysis
- Key MCQ clue: jaundice + anemia + splenomegaly

Hepatocellular Jaundice

- Fatigue, anorexia, nausea
- Right upper quadrant pain
- Fever (viral hepatitis)
- Dark urine
- ± pruritus
- History of: Viral hepatitis, Drug-induced liver injury (paracetamol), Alcohol abuse
- ↑ Both conjugated & unconjugated bilirubin
- ↑↑ ALT & AST (ALT > AST in viral hepatitis)
- Mild ↑ ALP
- Prolonged PT (severe disease)
- 📌 Key MCQ clue: markedly raised transaminases

Obstructive (Post-hepatic / Cholestatic) Jaundice

- Progressive painless jaundice
- Intense pruritus
- Clay-colored stools
- Dark urine
- Weight loss (malignancy)
- Causes tested in MCQs: Gallstones (painful jaundice), Carcinoma head of pancreas (painless jaundice), Cholangiocarcinoma, Biliary stricture
- ↑ Conjugated bilirubin
- ↑↑ ALP
- ↑ GGT
- Mild ↑ AST/ALT
- 📌 Key MCQ clue: pale stools + itching + high ALP

Physiological Neonatal jaundice

- Appears after 24 hours
- Peaks day 3–5

- Term baby, feeding well
- Unconjugated bilirubin

Pathological Neonatal jaundice
- Appears within 24 hours
- Very high bilirubin
- Causes: ABO/Rh incompatibility, Sepsis, G6PD deficiency, Biliary atresia (conjugated)

Gilbert syndrome
- Young adult
- Mild intermittent jaundice
- Triggered by fasting, stress
- Normal LFTs except ↑ unconjugated bilirubin

Crigler–Najjar
- Severe unconjugated hyperbilirubinemia
- Neonatal kernicterus

Dubin-Johnson syndrome
- Conjugated hyperbilirubinemia
- Black liver
- Benign

One-Line MCQ Pearls ⭐
- First cytopenia in cirrhosis → Thrombocytopenia
- Confusion + flapping tremor → Hepatic encephalopathy
- Massive hematemesis in cirrhosis → Esophageal varices
- Ascites + fever → SBP
- Gynecomastia in cirrhosis → ↑ Estrogen

Hepatitis A (HAV)
- Child or young adult
- Recent travel, contaminated food/water
- Outbreak in school/hostel
- Acute, self-limiting
- No chronicity
- Fever more common than in other hepatitis
- Anti-HAV IgM positive
- 👉 MCQ buzzwords: “fecal-oral transmission”, “traveler”, “self-resolving hepatitis”

Hepatitis B (HBV)
- Healthcare worker
- Unprotected sex
- Blood transfusion, IV drug use

- Acute hepatitis
- Chronic hepatitis
- Extrahepatic features: Polyarteritis nodosa, Glomerulonephritis, Serum sickness-like syndrome
- HBsAg positive
- Anti-HBc IgM (acute)
- Anti-HBc IgG (chronic)

Hepatitis C (HCV)
- IV drug user
- Blood transfusion before screening era
- Asymptomatic patient with abnormal LFTs
- Often asymptomatic initially
- High rate of chronicity
- Extrahepatic: Mixed cryoglobulinemia, Lichen planus, Porphyria cutanea tarda
- Anti-HCV positive
- HCV RNA positive
- 👉 Buzzword: “silent infection leading to cirrhosis”

Hepatitis D (HDV)
- Known HBV patient with sudden worsening
- Severe hepatitis
- Requires HBsAg to replicate
- Coinfection or superinfection
- Superinfection → more severe, higher risk of chronic liver disease
- 👉 MCQ line: “HDV cannot infect without HBV”

Hepatitis E (HEV)
- Pregnant woman (3rd trimester)
- Acute hepatitis with high mortality
- Fecal-oral (waterborne)
- Usually self-limiting
- Severe in pregnancy
- 👉 If pregnancy + acute hepatitis → HEV until proven otherwise

Fulminant Hepatitis
- Rapid onset jaundice
- Altered mental status (hepatic encephalopathy)
- Coagulopathy (↑ PT/INR)
- Hypoglycemia
- HBV ± HDV
- HEV (especially in pregnancy)
- Drugs + viral combo

One-Line MCQ Triggers to Remember

- Dark urine before jaundice → Hepatitis
- ALT > AST, >1000 → Acute viral hepatitis
- Pregnant + acute hepatitis → HEV
- IV drug user + chronic liver disease → HCV
- PAN + hepatitis → HBV
- Needs HBsAg to replicate → HDV

Acute hepatic failure

- Sudden onset jaundice
- Confusion → drowsiness → coma
- Asterixis (flapping tremor)
- Nausea, vomiting
- Right upper quadrant pain
- 📌 Buzzwords: “Previously healthy patient with sudden jaundice and encephalopathy”

One-Line MCQ Triggers to Recognize ALF

- “Sudden jaundice + confusion in previously healthy patient”
- “AST/ALT in thousands + INR prolonged”
- “Hypoglycemia with liver failure”
- “Pregnant woman with encephalopathy”
- “Paracetamol overdose with metabolic acidosis”

Alcoholic Fatty Liver (Steatosis)

- Chronic alcohol user with asymptomatic hepatomegaly
- Mild RUQ discomfort
- Often incidental finding
- ↑ ALT and AST (mild)
- AST:ALT < 2 (early disease)
- Reversible with abstinence
- Enlarged, fatty liver on ultrasound
- 👉 MCQs often ask: earliest / most reversible stage of ALD

Alcoholic Hepatitis

- Long-term alcohol consumption (often binge)
- Acute jaundice
- Fever
- RUQ pain
- Tender hepatomegaly
- ± Ascites
- AST:ALT > 2:1
- AST usually < 300 IU/L
- ↑ Bilirubin
- ↑ INR / PT

- ↑ ALP (mild–moderate)
- “Middle-aged man with chronic alcohol use”
- “Jaundice + fever + tender hepatomegaly”
- Maddrey’s Discriminant Function (severity)
- Treat with corticosteroids if severe

Alcoholic Cirrhosis

- Long history of alcohol intake
- Decompensated liver disease
- Ascites
- Portal hypertension
- Splenomegaly
- Variceal bleeding
- Hepatic encephalopathy
- Spider angiomas
- Palmar erythema
- Gynecomastia
- Testicular atrophy
- Muscle wasting
- Caput medusae
- Low albumin
- Prolonged PT
- Thrombocytopenia

One-Liner for Alcoholic Liver disease

- AST:ALT > 2:1 → Alcoholic liver disease
- AST and ALT both < 300 IU/L
- 👉 Reason: mitochondrial AST damage + pyridoxine deficiency
- AST > ALT but both < 300 → Alcohol
- AST > ALT > 1000 → NOT alcohol (think viral/ischemic)
- Jaundice + fever in alcoholic → Alcoholic hepatitis, not infection
- Most common cause of cirrhosis worldwide → Alcohol
- Most reversible stage → Fatty liver
- Prognostic score → Maddrey’s DF
- Pathognomonic histology → Mallory bodies

Non-Alcoholic Fatty Liver Disease (NAFLD)

- Middle-aged, obese patient with metabolic syndrome
- Asymptomatic or vague fatigue
- Incidental raised ALT/AST
- Obesity, type 2 diabetes, dyslipidemia
- No significant alcohol intake
- 📌 Buzz phrase: “Obese diabetic patient with mildly elevated transaminases”

Hemochromatosis

- Middle-aged man
- Longstanding fatigue
- Bronze skin
- Diabetes mellitus
- Signs of liver disease
- 👉 “Bronze diabetes”
- ↑ Serum iron
- ↑ Ferritin
- ↑ Transferrin saturation (>45–50%)
- ↓ TIBC
- Best screening test → Transferrin saturation
- Confirmatory test → Genetic testing
- Liver biopsy → for staging fibrosis, not diagnosis
- Treatment of choice → Regular phlebotomy
- Chelation (deferoxamine) → only if phlebotomy not possible
- Cirrhosis + diabetes + arthritis ≠ NASH → think hemochromatosis
- MCP arthritis → not rheumatoid arthritis
- High ferritin alone ≠ diagnosis (check transferrin saturation)
- Bronze skin + diabetes + cirrhosis → Hemochromatosis
- Most affected joint → 2nd & 3rd MCP
- Screening test → Transferrin saturation
- Gene mutation → HFE (C282Y)

Wilson disease

- Child, adolescent, or young adult (<40 years)
- Family history of liver disease or unexplained neurologic symptoms
- Autosomal recessive
- Classic MCQ: Teen with acute liver failure + hemolysis → think Wilson disease
- MCQ clue: Young patient with tremor + liver disease
- Coombs-negative hemolytic anemia
- ↓ Ceruloplasmin
- ↑ 24-hour urinary copper
- ↑ Hepatic copper concentration
- Serum copper may be low or normal
- Low ALP in acute liver failure
- Teenager with liver disease + tremor + Kayser-Fleischer rings + low ceruloplasmin = Wilson disease

alpha-1 antitrypsin (A1AT) deficiency

- Young patient with basal emphysema and family history
- Child with jaundice or cirrhosis
- Adult with COPD not explained by smoking
- Lab hint: low alpha-1 antitrypsin, PiZZ phenotype

- Rare clues: panniculitis or ANCA-positive vasculitis

Cholera
- Contaminated water / poor sanitation
- Profuse “rice-water” stools
- Severe dehydration
- Hypotension, sunken eyes
- Treatment focus: aggressive rehydration

Shigella
- Child in daycare
- Bloody diarrhea + high fever
- Tenesmus (painful defecation)
- Seizures may occur (important exam clue)
- Risk: HUS

Giardia lamblia
- Camping / stream water / day-care
- Greasy, foul-smelling stools
- Weight loss / bloating
- Chronic if untreated