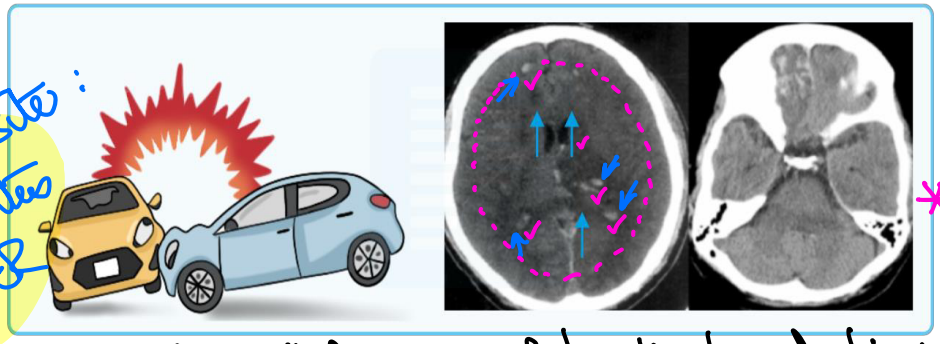
Q. Patient had a head on collision of car while driving under influence of alcohol. Day 3 of admission GCS score is 7/15 and relatives are arguing about lack of medical care. NCCT head is show below. Diagnosis is?

COMA: ≤ 8



PUNCTUATE HEMORRHAGES at G-W junction

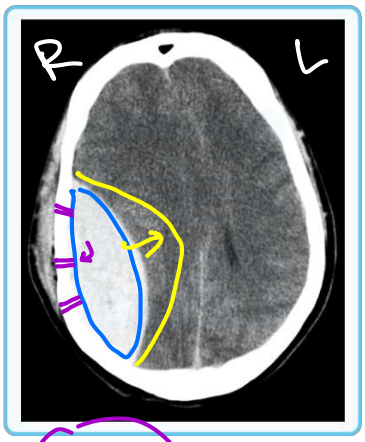
* DAI : ≥ 4 µ bleeds
  TAI : NCCT (n)
  ↓ nxt
  S-W MRI (Hemosiderin)

M/C site decubitus UCER :

Rx:- Mannitol, care of back, bowel, bladder

Ischium, Sacrum, Trochanter, Heel

Q. Guy is struck on head with cricket ball. He becomes unconscious for few minutes. He wakes up and resumes playing and score a half century. After the match he tells the coach that he is having headache and wants to sleep in dressing room. After few hours he is non-responsive and is brought to ER.



* unconscious → Conscious → unconscious
  lucid interval
* ◯ lenticular HYPERDENSITY +

Rt sided Extradural H

MMA branch of ECA

Rx: BURR Hole
CRANIOTOMY + ligation of bleeder
decompressive Hemicraniectomy
Mannitol CI
active CNS bleeding

1st line / TOC

BURR Hole Sx ↓ PTERION

1. POSTURING
2. MID line shift
3. Ch. SDH

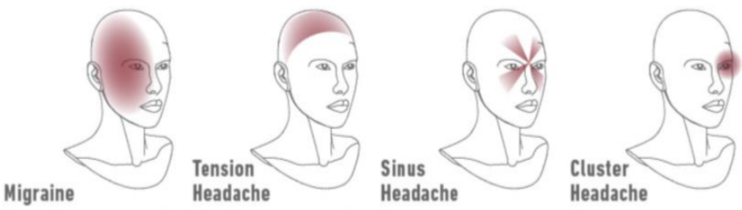
malignant CEREBRAL Edema

* EDH	: CRANIOTOMY + ligation of B
* SDH acute	: CRANIOTOMY
SDH chronic	: BURR Hole Sx
* EDH + POSTURING	BURR Hole Sx
SDH + "	

Headache

MC type of headache: Tension type headache (diagnosis of exclusion)

Most common cause of secondary headache : Systemic infection



DURA

4+/5, > 5 attacks/yr

Migraine

-mediator: → C.G.R.P : ⊕ V nerve endings

-Aura: zig zag lines

-POUND PULSATING/THROBBING, one day illness ONSET: < 24 HOURS, UNILATERAL NAUSEA, DISABLING : photophobia, phonophobia aggravation : c̄ neck movts

Rx ↓

DOC 1st → -Most efficacious triptan: Rizatriptan 5HT1B/1D agonist

-Triptans not given in patients with pregnancy and ASCVD. Use LASMIDTAN *

prinzmetal angina

-Prevention of attacks with once-a-month injections

↳ GALCANEZUMAB ERENUMAB

(or) PRPNL : lipid ↑ glucose ↑ uric Acid ↑ 1° ↑

* -Ona-botulinum A inj

-MIDAS score for disability with migraine

Migraine disability SCORE > 21 : → start 1°

(MN) Pain diary ↓

Cluster headache

♂, Male with retro-orbital pain and epiphora and nasal congestion (1-8 attacks per day with duration of 15-180 minutes)

RX: First line High flow O2 @ 12-15L/min and DOC ↓ SUMATRIPTAN injection SC

WONG BAKER FACES Pain Rating scale

Prevention: VERAPAMIL

mutilation + : lithium

avg: < 24 HOURS

migraine: 4 - 72 HOUR : one attack/day

STROKE: 10% (Hemorrhagic)

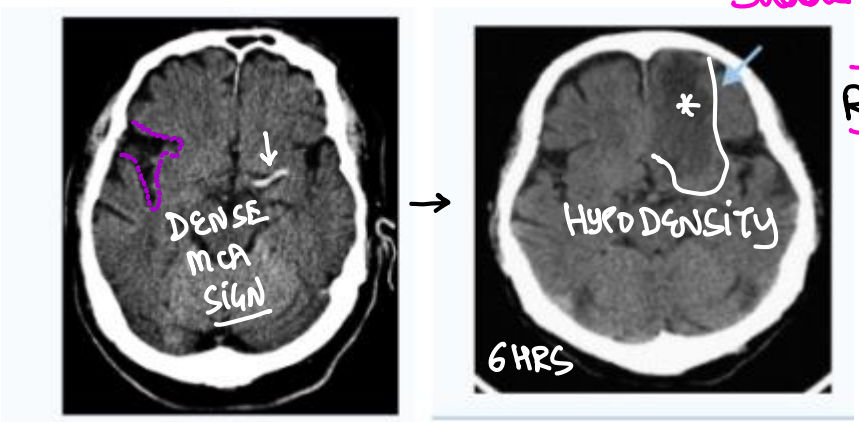
Acute ischemic stroke 90%

(ischemia occurs when brain blood flow decreases to less than 20 ml per min)

60-year-old man with DM and HTN develops sudden onset face deviation and arm weakness for last 3 hours. NCCT shows dense MCA sign.

CVA: Brain attack → BE FAST

Sudden onset



→ balance issues

R → L

pt looks Towards lesion

eye deviation

face asymetry

arm weakness

speech issues

Time is NEURONS!

D.I.T

✓ Door to imaging time for stroke → 25min of arrival

✓ Next investigation if NCCT head is normal → CT angiography : L.V.O

✓ IOC for early detection of Acute ischemic stroke → DIFFUSSION- weight-MRI

Window period for management of AIS : < 4.5 HOUR

Symptom onset

Tenecteplase > alteplase

H-22: < 6 HRS

2026 : < 9 HRS

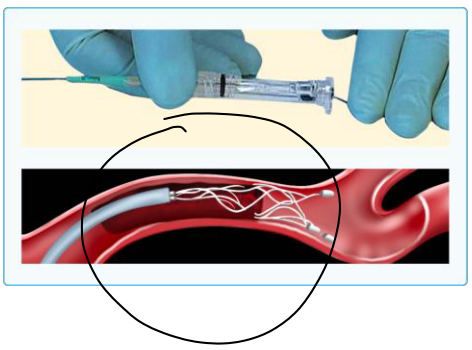
Update

Priorities of acute stroke consultation

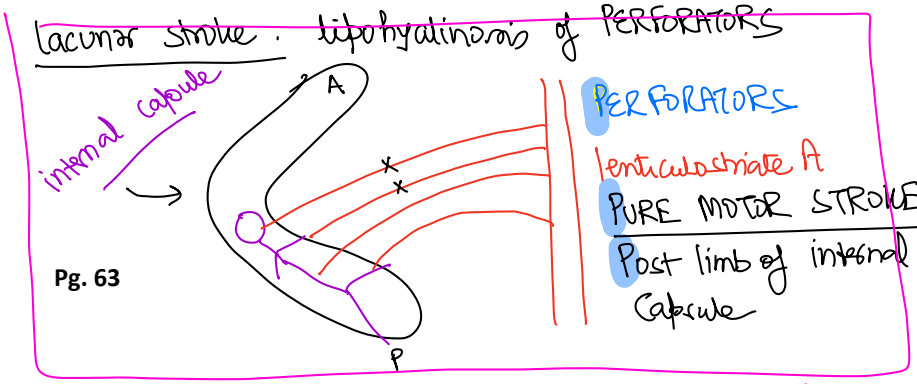
1. Assess Airway and BP : > 185/110 mm Hg = lower BP
2. Clearly establish the time patient was last seen normal
3. Calculate NIHSS Value (Value > 5 is eligible for EVT or thrombolysis with IVPA or Tenecteplase 0.25 mg per kg

National Institutes of health STROKE Scale

4. If CT scan is normal, next best investigation is CTA : LVO

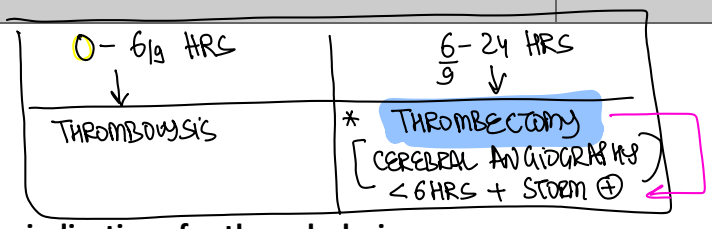


Lacunar stroke : lipohyalinosis of PERFORATORS



- MERCI mechanical embolus Retraction
- Endovascular THERAPY

Thrombolysis	Mechanical thrombectomy
Window period < 4.5 hours 2026 update Extended window 4.5–9 hours from last known well in imaging-selected patients (CTP / MRI mismatch) 1. Wake up stroke (update) 2. Salvageable tissue in 4.5 to 9 hours from last know well	Done for LVO involving 1. Proximal MCA and ICA 2. Basilar artery occlusion (update) Can be done for which candidates 1. 0-6 hours: irrespective of thrombolysis eligibility Give IV Tenecteplase if eligible (do not delay MT) 2. 6-24 hours: based on CTP report



Contraindications for thrombolysis

INDICATION	CONTRAINDICATION
Clinical diagnosis of stroke **Onset of symptoms to time of drug administration ≤4.5H** **CT scan showing no hemorrhage or edema of >⅓ of the MCA territory** **Age ≥18 years**	**Sustained BP > 185/110 mmHg despite treatment** **Bleeding diathesis** **Recent head injury or intracerebral hemorrhage** **Major surgery in preceding 14 days** **Gastrointestinal bleeding in preceding 21 days** **Recent myocardial infarction**

S * Sustained BP > 185/110 mm Hg despite Rx → MERCI / EVT

↓ lower BP ⊂ Nicardipine

T

O * Bleeding diaTresis INR > 1.7

R * GASTROINTESTINAL Bleeding : < 21 days

M * RECENT ICH | Recent Head injury

* RECENT MI

any 1 of STORM: ⊕

Thrombolysis is indicated in	Thrombolysis is contraindicated in
* AIS: < 6 HOURS	* STORM + any 1: < 6 HOURS

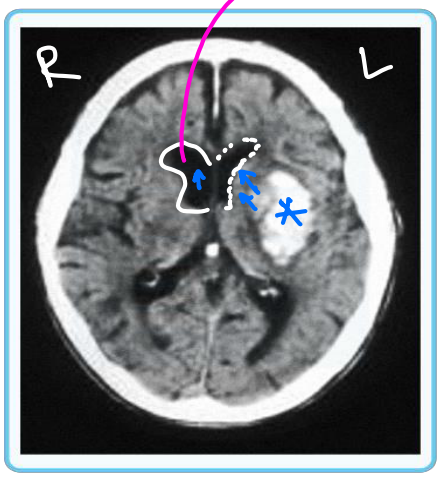
Reperfusion window for STEMI alteplase	< 12 HOURS
Reperfusion window for AIS (ideal) Tenecteplase	< 4.5 HOURS
Golden period for MI	1-3 HOURS
Drugs approved for thrombolysis in AIS	**Tenecteplase and alteplase** Bolus fibrinolytics

→ TARGET BP ⇒ 140/90 mm Hg

Hemorrhagic stroke

HTN CRISIS : > 180/120 mm Hg
+ Target organ #

60-year-old man with Hypertension develops sudden onset face, arm and leg weakness while eating breakfast at the dining table. He is rushed to hospital where NCCT head is done. What is the site of lesion?



* Lt. intraparenchymal bleeding
* THROMBOLYSIS CI
  - S/E: brain hemorrhage

Rx
1. Obstructive Hydrocephalus
   - → EVD or ventriculostomy
2. lower BP = Nicardipine or labetalol

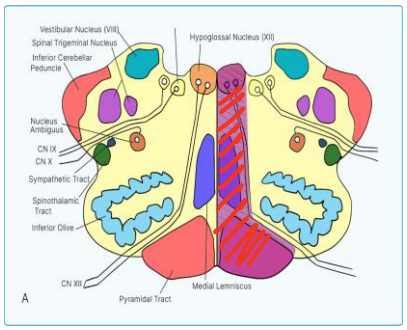
Q SHORTEST acting CCB ↓
Clevidipine

Q. SHORTEST acting β BLOCKER ↓
LANDIOLOL

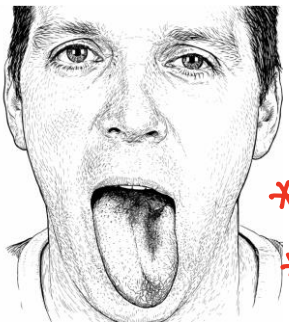
* WARFARIN Toxicity ⊂ ICH
  Rx: PCC + vitamin K
* Apixaban Toxicity
  Andexanet α
* DABIGATRAN Toxicity
  IDARUCIZOMAB

* MC sites of Hemorrhagic STROKE
  - → PUTAMEN (PERFORATORS: lenticulostriate A.)

Stroke Syndromes



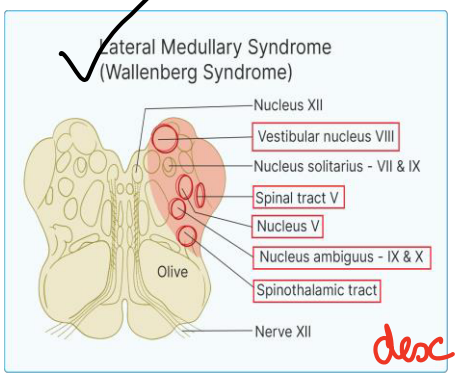
Medulla



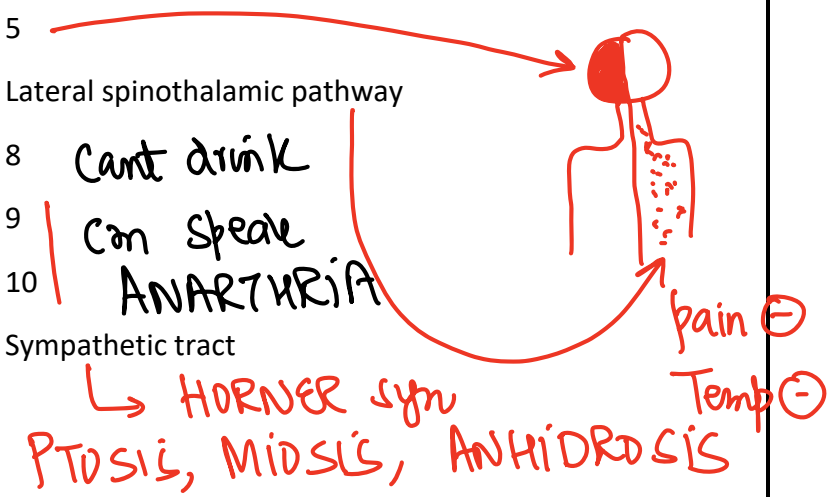
Anterior spinal A #

* I/L Tongue deviation
* C/L Hemiplegia

medial medulla #



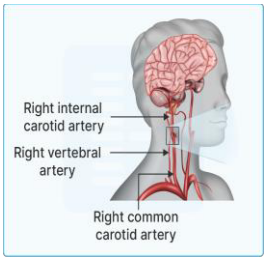
1. Vx A
2. PICA



* WEBER = I/L 3 + ~~CRUS CEREBRI~~ C/L Hemipl^{N}
* BENEDIKT = I/L 3 + Basal ganglia : C/L chorea
* NONTHANGEL = I/L 3 + SCP : C/L ataxia

Transient ischemic attack

Parameter			Score
A	Age	≥60 years	1
B	Blood pressure	Systolic ≥140 mm Hg or diastolic ≥90 mm Hg	1
C	Clinical	Unilateral weakness Speech problem, no weakness Any other	2 1 0
D	Duration	≥60 min 10-59 min <10 min	2 1 0
D	Diabetes	Yes	1



ABCD$_2$ Score
↓
PREDICT THE % chances of STROKE occurence
any 1 + Spontaneous Resolution

1. (Ophthalmic A #): AMAUROSIS FUGAX: Transient blindness
2. (MCA #) C/L face asymetry arm weakness
3. (ACA #): paraparesis
4. (Vx A #): Nasal Regurgitation of fluids
   Nasal Twangs
   DYSARTHRIA

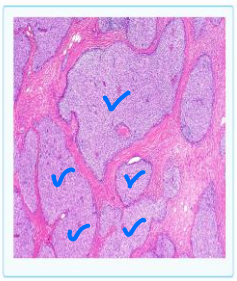
WORK UP
1. ECG: r/o atrial fibrillation
2. TEE: r/o LAA clots
3. lipid profile: LDL ↑

CUT OFF: Resolution: < 24 HOURS
symptom improvement

Rx: DAPT = Aspirin + Ticagrelor
ATORVASTATIN ± APIXABAN

M. Gravis

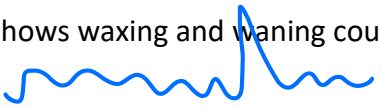
ICE PACK TEST



- Myoid cells of thymus act as source of autoantigen
- 65% cases associated with THYMUS HYPERPLASIA
- 10% cases associated with THYMOMA

* TYPE II HSR

- Decreased synaptic transmission at myoneural junction — POST-JUNCTIONAL #
- Shows waxing and waning course and does not show complete remission



- Anti Ach R antibody causes

1. Accelerated turnover of Ach R
2. Blockage of active site of AchR
3. Damage to post synaptic muscle membrane

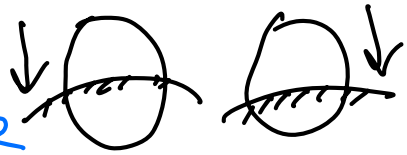
↓ Receptor available

Hallmark: EXERTIONAL FATIGUE (excessive)

Young ♀ | > 50yo:

1. Diplopia
2. Ptosis (asymmetrical) is most common ocular finding. Pupils are not affected
3. Diurnal variation of symptoms with weakness more in evening
4. Dysphagia and Dysarthria
6. Diaphragmatic weakness leading to dyspnea in M. Crisis
7. Muscle weakness with DTR normal

LAPTOP SMART PHONE



Work up

1. Screening → ICE-PACK TEST
2. Most specific test(confirmation) → Anti Ach R Titer
3. IOC → SFEMG > Repetitive ⊕ Test decremental R
4. Imaging → CT chest

THYMIC HYPERPLASIA > THYMOMA

5. Coexistent autoimmune disease : Hashimoto, grave's

Common Errors

Q. Bilateral ptosis in a patient, which investigation must be done first: MRI head *

Q. Antibiotic safe in patients with MG = Linezolid

Q: MG are resistant to depolarizing NM blocking agents like Sch

Generalized M. Gravis	Ocular M. Gravis
TOC: Thymectomy DOC: pyridostigmine + prednisolone Azathioprine	Ocular muscles are more prone to depolarization block * pyridostigmine: paradoxical worsening Rx: Prednisone : DOC

48-year-old woman presents with progressive proximal lower limb weakness for 4 months. Weakness is worse in the morning and improves after walking for a few minutes. Examination reveals absent deep tendon reflexes that transiently improve after sustained muscle contraction. She also reports dry mouth. What is the most likely diagnosis?

a. Myasthenia gravis

b. Lambert-Eaton myasthenic syndrome

c. Polymyositis

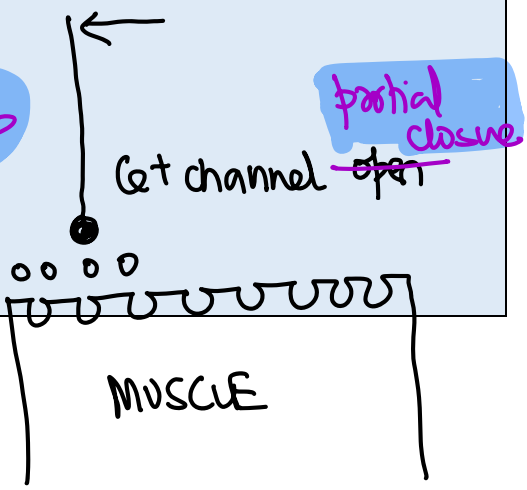
d. Guillain-Barré syndrome

* low r stimulation
DECREMENTAL Response

RNS ↓

* Low frequency stimulation: Decrement
High frequency stimulation or post-exercise: Increment

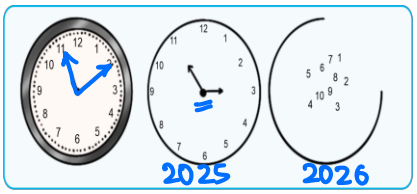
Oat cell
Ca lung: Alb



♀ 1. LIMB WEAKNESS
2. PTOSIS
3. DTR ABSENT

Alb: Anti P/Q Alb

TOC: 3,4 aminopyridine : ⊕ Ach release

Alzheimer disease	Parkinson disease	Huntington disease
# ENTORHINAL CORTEX		TETRABENAZINE : Rx
Ach deficiency	Dopamine deficiency	Dopamine excess and GABA is less
# Nucleus of Meynert basalis	Substania nigra #	Caudate nucleus #
Hirona bodies	Lewy bodies	mutant huntingtin protein
Tau protein Tauopathy	Alpha synuclein defect 50yr	Rich in polyglutamine (poly-Q) repeats
 Clock FACE TEST	Non-Motor * ANOSMIA * Constipation	Ubiquitin-positive * Autosomal dominant, chromosome 4 defect, trinucleotide (CAG segment) repeats and anticipation
NEURITIC PLAQUES (Aβ) NEUROFIBRILLARY TANGLES 4A 1. AMNESIA 2. APHASIA	MOTOR Pill rolling T earliest, 4-6 Hz T: TREMORS Resting R: RIGIDITY Cogwheel	50yr: DEMENTIA CHOREA Rigidity
△▽ ✡ ○ loss of visuo spatial skills 3. APRAXIA	Must have CRITERIA A: Bradykinesia	bradykinesia family H/O + imaging = MRI head
4. ANOSOAGNOSIA = apathy	P: Postural instability	Rx: Tetrabenazine

Masked faces
Festinating gait

IOC: Amyloid-PET

Screening: MMSE : (dementie) < 24/30 item
21-24
10-20
<10 Rx: * DONEPIZIL RIVASTIGMINE

IOC PET-DOPA
Rx: Levodopa + carbidopa
* dyskinezia: Amantidine

MCI ~~LECANEMAB~~ → AD * OFF phenomenun: apomorphine SC

drug induced PD = dopamine ↓ = BENZHEXOL
Ach ↑ TRIHEXIPHENIDYL

Guillain Barre syndrome

Bright FAME: Brighton criteria

Flaccid paralysis bilateral

Areflexia , ascending paralysis, Albuminocytological dissociation

Monophasic course = 12 HOURS – 28 days

Electrophysiological studies for diagnosis: NCV

Pathophysiology

Demyelination of peripheral nerves and nerve roots from spinal cord due to type II hypersensitivity

seen after infection with: C.Jejuni, Zika virus, HEV

Work up

1.Electrodiagnostic testing: NCV

2.Lumbar puncture

Treatment

1.IVIG

2.Plasmapheresis

3.Role of steroids

TYPE II HSR
demyelination #

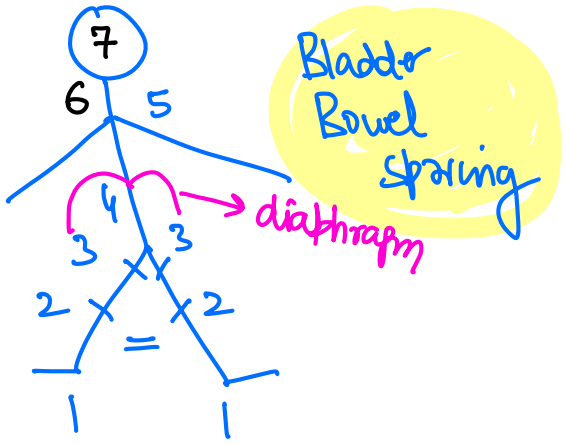
Resp paralysis → death

F-Reflex : latency ↑

MC CRN involved: BIL 7th N # facial diplegia

TOC/DOC

efficacy equal



AIDP MC	Acute inflammatory demyelin polyneuropathy M+S + autonomic insufficiency
AMAN	Acute motor axonal neuropathy
AMSAN	Acute motor-sensori " "
MFS Rare	MILLER FISHER SYN * Ophthalmoplegia (3rd N #), arreflexia, ataxia

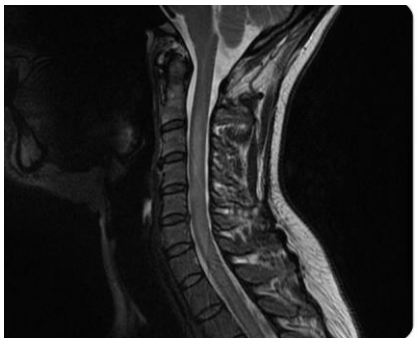
Anti GM1

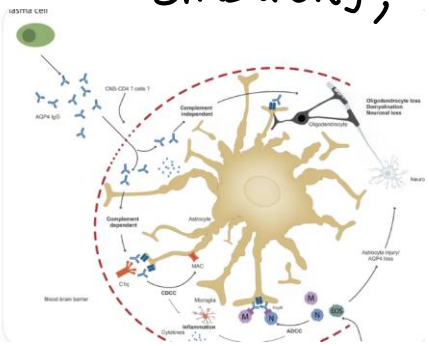
Anti GQ1b

CSF: cells (n) sugar (n) color (n) pressure (n)
PROTEINS ↑ (> 7days of admission)
ALBUMINO-CYTOLOGICAL dissociation.

MULTIPLE SCLEROSIS ⇒ OPTIC NEURITIS U/L
URINARY INCONTINENCE
SPASTICITY, UTHOFF phenomenon
Heat +: neuro worsening
gadolinium enhanced
MRI = dawson fingers
Macdonald's
CRITERIA

Neuromyelitis Optica / Devic disease





acute → Rx: methylprednisolone
1°: Ocrelizumab

Pathophysiology

- IgG against Aquaporin-4 on astrocytes
- Severe necrotizing demyelination (optic nerve + long spinal cord segments) ← episodes

♀

Clinical features

A: Area postrema syndrome: intractable vomiting and hiccups

B: Brain stem syndrome → U/L 3rd N palsy + C/L Hemiplegia

C: Cord involvement. Longitudinally extensive transverse myelitis
- Lesion > 3 vertebral segments *
- Early bladder involvement

PARAPLEGIA, URINE incontinence
STOOL "

D: Diencephalic syndrome: unexplained weight loss and hypersomnolence

E: Eye involvement: optic neuritis bilateral

Work up

1. AQP4-IgG positivity ✓
2. MRI spinal cord showing LETMS ✓ >3 consecutive segments

Rx:

- Acute: IV steroids ✓ + Plasma exchange
- Maintenance: Rituximab

* MRI brain ⇒ cloud like lesions = NMO
* MRI " ⇒ FINGER like (dawson F) = MS
PERIVENTICULAR lesions

Additional Notes

GBS ⇒ IVIG = plasmapheresis

MS = methyl-P, OCRELIZUMAB : PPMS

NMO = methyl-P ± plasmapheresis : Remove Anti AQP4
RITUXIMAB

NATALIZUMAB = PML
↓ PROGRESSIVE MF
JC VIRUS leucoencephalopathy

MC CRN involved in Raised ICP
6th N palsy

MC CRN : LONGEST OVERALL : vagabond : Vagus
" " LONGEST INTRACEREBRAL : TROCHLEAR
COURSE
" " LONGEST INTRAOSSEUS : FACIAL
" " INTRADURAL " ABDUCENS
subarachnoid

* False localising sign ⇒ 6th N palsy

* WERNICKE encephalopathy : DRY-BERI x2
B1↓
G : global confusion
O : ophthalmoplegia : 6th N palsy
A : Ataxia
N : Nystagmus
RBS
55mg/dL

Rx: IV THIAMINE + IV DEXTROSE

Additional Notes

→ IV DEXTROSE + IV THIAMINE

KORSAKOFF Psychosis

* CONFABULATION
* ANTEGRADE AMNESIA

lesion: mamillary body

Alcohol deaddiction

DOC: Acamprosate + NALTREXONE
└ Craving ⊖

DELIRIUM TREMENS

> 48 hrs: alcohol cessation : CIRRHOSIS

1. Sym ⊕ Palpitations, TREMORS, MYDRIASIS
2. RAGE attacks
3. DROWSY
4. Hallucinations — Visual H : Alice in Wonderland / MICROPSIA
   Tactile H — Formication
   auditory H

Rx: * RESTRAINTS
* IV LORAZEPAM

Additional Notes

Additional Notes

Additional Notes

Additional Notes

Additional Notes

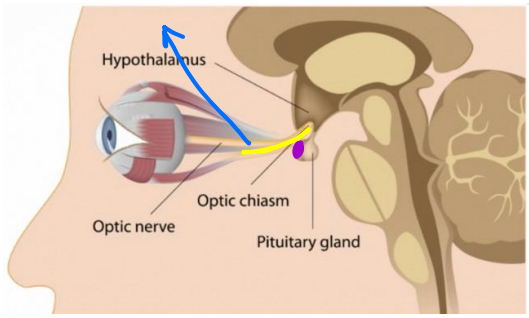
Additional Notes

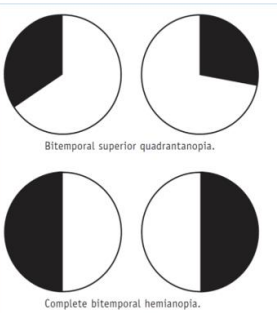
Endocrinology

Pituitary gland

MC tumour of pituitary is Non functioning Adenoma

MC *functioning* tumour of pituitary Prolactinoma





Pie in sky

bitemporal Hemianopia

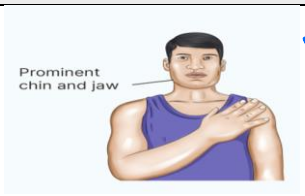
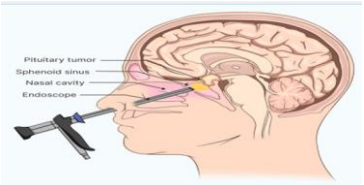
- Pituitary adenoma grows upward (suprasellar extension)

- Compresses the optic chiasm from below

- *Inferior fibers of optic chiasm that carry superior temporal field vision are compressed first*

- Leads to *superior* temporal quadrantanopia *

LACTOTROPH SOMATOTROPH

	Prolactinoma	Acromegaly
Buzz word in clinical bytes	"galactorrhea" ♀ : dopamine → Prl → LH/FSH (−) (−) 1 – Anovulatory cycles 2 – Amenorrhea 3 – visual defects	 Height = same - SPADE like hands - Prognathism * - Galactorrhoea - Weight gain with IGT - Hypertension SOMATO-LACTOTROPH adenoma FBS: 100-125 mg
Screening	Serum Prolactin levels ✓	↑ IGF-1 level somatomedin levels
IOC	MRI with contrast to evaluate Sellar mass	OGTT: failure to suppress GH After 75 g oral glucose: GH remains >1 ng/mL
1st line intervention	**Patient desirous of pregnancy: Bromocriptine** only GALACTORRHEA (+) **Patient completed family** CABERGOLINE	**Macroadenoma** : >10 mm size Transsphenoidal Sx **If high surgical risk or macroadenoma invading cavernous sinus** SRL: LANREOTIDE inj SC (shrinks the TUMOR) **Residual disease after surgery** PEGVISOMANT: GH receptor blocker 

++ TRH
++ TSH
Prl ++

↓ I_2 : T_4 ↓ T_3 ↓
Primary Hypothyroidism

galactorrhea
1. CKD ← D. Nephropathy
2. Antipsychotics
3. 1° Hypothyroidism
4. PROLACTINOMA

DM → * RBS > 200 + Polyuria, Polydipsia, wt loss
Plasma β OH BUTYRATE level: IOC DKA

Emergency	First line intervention	Drug of choice
DKA D RBS > 250 mg K KETONEMIA/URIA A pH < 7.3, HCO_3 < 15	NORMAL Saline infusion + KCL (40meq/L) infusion No routine role of soda bicarb	1 HOUR → Insulin drip 0.05-0.1 U/kg * pH: 6.9 : soda bicarb
HHS Adult with T2DM is excessively sleepy and drowsy, RBS is > 600 mg/dl, ketones 2+	Aggressive fluid resuscitation with normal saline NORMAL Saline infusion * β-osmolality ⇒ ↑	(γ) Insulin infusion
Severe hypoglycaemia (unconscious)	Airway + IV access < 54 mg/dl	IV 25-50% D altered mentation, seizures + inj glucagon SC
Thyroid storm ↓ Failure to achieve euthyroidism before Sx/Radioiodine ablation	Beta blocker PROPRANOLOL IV	P.T.U rectal / NG Tube : T_4 ⊖ → T_3 ⊖ Temp ↑ > 40.5° Cue Temp Acidosis, death : arrythmias
Myxoedema coma ✓ • non compliant ↓ T_4 • intercurrent illness : UTI pneumonia	Secure airway External rewarming IV hydrocortisone to prevent concomitant Addison disease being unmasked and worsen the patient Temp ↓ < 35°C CALORIGENESIS	IV levothyroxine T_4 IV liothyronine T_3

Type 1
4+ ←
Type 2 insulin Resistance
✓
STARVATION

BP↓ + Sugar ↓

WUNDERLICH: Angiomyolipoma in kidney
TS bleed

Endocrine emergencies

Addisonian crisis 1 - sudden stoppage of steroids 2 - N.meningitidis : Adrenal hemorrhage : WATERHOUSE FRIEDERICHSEN	Rapid IV fluids (NS) =	iv Hydrocortisone
Pheochromocytoma intra op HTN crisis =	Sodium nitroprusside INFUSION LVF SpO2↓, BP↓, BIL CREPTS +	Drug that be used both intra-op and post-operatively ↓ Nicardipine labetalol
Hypercalcaemic crisis ↓ Squamous cell Ca lung : Confusion & disorientation LABS : Calcium : > 11mg/dL	iv NORMAL saline + FUROSEMIDE loop diuretics : lower Calcium	IV Bisphosphonates ZOLENDRonate Calcitonin nasal spray for rapid effect DENOSUMAB PHOSPHATE Hemodialysis
Tetany THYROID Sx 3 days ↓ PERIUNGUAL, PERIORAL paresthesia BP CUFF: SBP + 20 mm Hg → 3min carpedal spasm (TROUSSEAU SYNDROME) CHVOSTEK : CIRCUMORAL muscle Twitching (facial N) death: → Laryngospasm	Inadvertent parathyroid Resection Rx : 10ml of 10% Cal. gluconate OVER 10min	

PTH-rp

Tumor handling = Catecholamine surge

WORK-UP :
1. ECG → QT prolongation
2. S-Calcium ⇒ ↓

Endocrine emergencies

Euglycemic DKA (SGLT2i)	IV fluids + KCL	IV insulin (stop SGLT2 drug)

Gradual correction of hyponatremia is done to avoid risk of ODS. Max correction of 6-8 meq rise per day

-**SGLT2** inhibitor provide Cardio renal benefit and are used in

1. DM plus CHF
2. DM plus nephropathy

Side effects: UTI, mycotic genital infections

Common error

-For management of DM plus ASCVD start

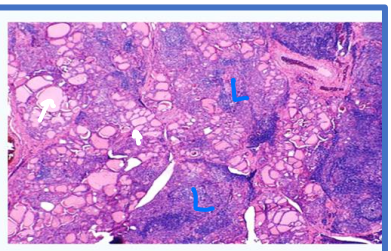
Side effects=

1. PANCREATITIS
2. GI upset
3. wt loss
4. Vision loss due to sudden fall of HbA1c

* *Tirzepatide has the maximum glucose lowering property. Dual agonist: GIP + GLP-1 receptors*

Queen Annie sign

Diagnostics / Investigation of choice for various endocrine conditions



Primary hypothyroidism	Secondary hypothyroidism | CENTRAL
HASHIMOTO	SHEEHAN
TSH ↑ T4 ↓ T3 ↓	TSH ↓ T4 ↓ T3 ↓
gland #	pituitary #

Nxt

anti TPO
anti Thyroglobulin
" microsomab

MRI HEAD

Hypothyroidism and Hyperthyroidism	
Suspected thyroid dysfunction (any)	TSH
Primary hypothyroidism	TSH monitoring for Response assement
Central hypothyroidism	← TSH is USELESS
Grave's disease	TRAB TITER

+ diffuse ↑ THYROID
+ Radioisotope scan: diagnostic
I-123

Thyroid
I-131 : Ablation
I-123

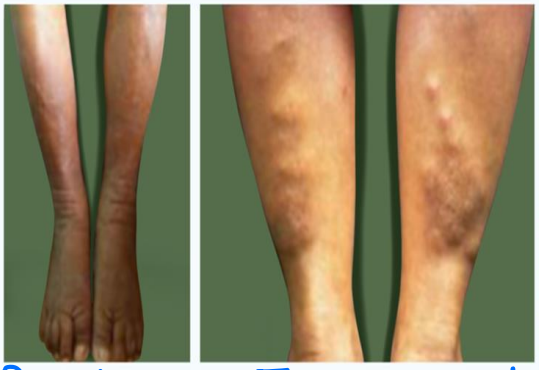
TSH Receptor ⊕ Ab

Riedel's = stony hard gland, FIBROSIS +

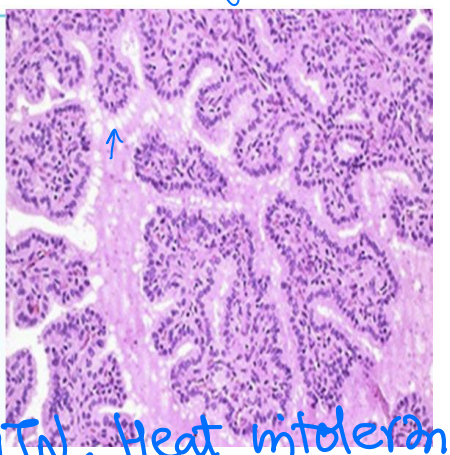
* GRAVE'S : earliest : → DYSPHORIAL Anxiety

STARE SIGN ↓ MULLER muscle +

PRE-TIBIAL myxedema



x Scalloping of follicles



Palpitations, TREMORS, HTN, Heat intolerance

MC EOM

Muscle involved in Grave disease → INF RECTUS

methylpredn^N

Most specific feature of Grave disease → Thyroid eye disease grave's ophthalmopathy ↑

Antibody responsible for grave disease → TRAB

Drug of choice for management of grave disease → CARBIMAZOLE

Drug of choice for management of grave disease in pregnancy T1 → P.T.U

* Carbimazole : 1. CHOANAL ATRESIA
2. CUTIS APLASIA

* black BOX warning P.T.U
Hepatotoxicity

Hepatotoxicity
1. Pyrazinamide
2. valproate
3. P.T.U
4. Halothane

X TACRINE

X TOLCAPONE

Disease of Adrenal glands	
Condition	**Investigation of choice**
ACTH independent Cushing syndrome	
Primary aldosteronism	
Pheochromocytoma	24-hour urinary
Adrenal insufficiency	ACTH stimulation test

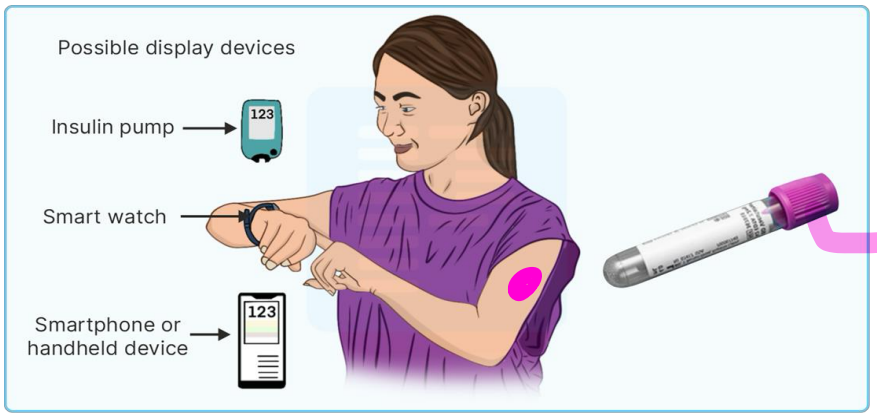
Nxt Time

Common errors

1. **Best for monitoring of diabetes mellitus**
   a. CGM
   b. HbA1c
   c. Glycated albumin
   d. RBS

2. **Not a classic symptom of Diabetes mellitus**
   a. Weight loss
   b. Polyuria
   c. Polydipsia
   d. Polyphagia

3. **Chromosome involved in pathogenesis of T1DM**
   a. 2
   b. 4
   c. 6
   d. 8



Diagnosis of Diabetes mellitus

mg/dl	**Normal**	PRE-DIABETES	**Diabetes mellitus**
Fasting ↓ OGTT	< 100	100-125 Impaired fasting glucose	> 126 mg
75 gm Glucose ↓ 2hr Value	< 140	140 - 199 Impaired glucose Tolerance	> 200 mg

plasma glucose

Not used for Diagnosis of DM is

└ Post prandial value

Glycosylated haemoglobin

Normal	< 5.6%
Pre-Diabetes	5.7-6.4%
Diabetes mellitus	≥ 6.5%

Best test for Long term control of DM: → HbA1c (R) 8-12 wks

Best test for short term control of DM: → S. FRUCTOSAMINE (R) 2-3 wks
glycated albumin

Falsely high HbA1c: → ANEMIA: IDA

falsely low → HbA↓: Thalassemia
PRBC: BRONZE DIABETES

Diagnosis of DM

Polyuria, Polydipsia, wt loss +	RBS > 200
asymptomatic,	FBS > 126, 2hr > 200
// ,	HbA1c > 6.5%

Common errors in management of DKA

D RBS > 250 mg/dL **K** KETONURIA **A** pH < 7.3

1st line management in case of shock / Thready pulse/ Crashing Pulse

→ NS bolus : 20 cc/kg Till pulse is palpable

1st line management in case of evidence of dehydration (Tachycardia, low BP)

1. Normal saline or Ringer lactate infusion = NS + KCl > RL (40 meq/L) → Kt 4.0 meq
2. Check potassium values and hold insulin if potassium is less than 3.3 meq/L
3. Start regular insulin drip after 1 hour @ 0.05-0.1 unit / Kg/ hr (1 hr)

↳ INTRACELLULAR SHIFT of Kt

* **Cause of death in DKA** → CEREBRAL EDEMA