

Schizophrenia:

Psychotic disorder

Marked by impaired thinking
Emotions & behaviours.

They unable to filter sensory stimuli and
have enhanced perception of sounds, colour
& other features of their environment.

Course of schizophrenia

divided into 3 stages

1. Acute phase → Pat has overall loss of contact
w/ reality
2. Stabilization " → Initial psychotic symptoms brought
under control.
There will be risk for relapse
if interrupted (treatment)
3. Maintenance " → Pat relatively stable
and can be kept indefinitely
on anti psychotic drugs.

Some psychotherapists using a classification of the
Type I / Positive schizophrenia
Type II / -ve schizophrenia.

(2)

Positive schizo → Has Rapid onset of symptoms & tends to respond well to drugs.

Negative schizo → poorly adjusted ~~before their~~ ~~state~~
-ve symptoms such as withdrawal from others
slowing of mental & physical reactions

Etiology :

Combination of Physical
genetic
Psychological
Environmental factors

} can
make a
person
to
develop
schizophrenia

Some people prone to schizophrenia

↳ a stressful or emotional life event might

trigger a psychotic episode.

Things that increase the chances of developing
schizophrenia include :

③ Genetics : In Identical twin If one develops
Other has one in 2 chance of developing it
as they share same genes.

In Non Identical who have different
genetic make ups, if one has the other
develops . has one in 7 chance of developing.

Neurotransmitters : Imbalance b/w Dopamine & Serotonin
(change in level)

Also have found a change in
Body's sensitivity to Neurotransmitters
- this - part of cause of schizophrenia

Pregnancy & Birth complications

- a low Birth weight
- premature labour
- lack of O₂ during birth - (Asphyxia)

Stress & Drug abuse are triggers which cause schizophrenia
as such they don't cause schizophrenia but
can trigger its development in someone who are
already vulnerable to it.

Stress like

losing job / home
divorce
End of relationship
Physical / sexual / emotional abuse,

Drugs like

cocaine
cannabis
amphetamines } trigger symptoms of schizophrenia who are susceptible

Studies show teenagers under 15 who use cannabis regularly, especially 'skunk' are up to 4 times more likely to develop schizophrenia by age of 26 yrs.

Symptoms

Positive symptoms: An excessive or distorted version of normal functions

where the pat's give unrelated answers to questions
speech so incoherent that it makes no grammatical or linguistic sense
Disorganised behaviour means that the

(5)

Pat has difficulty w any type of purposeful or goal
behaviors may include dressing in odd or inappropriate
ways, / agitated shuffling / ceeting.

Negative Symptom :- Called because they represent
lack / absence of behaviors that
are considered diagnostic of schizophrenia

i.e. Lack of Emotional response
Poverty of speech.

Absence of volition or will

Diagnosis :-

No specific laboratory tests to diagnose.

After ruling out the organic disorders like temporal
lobe Epilepsy, Wilson's disease, Huntington's chorea

Clinician will consider other psychiatric conditions

Treatment :-

Depends on stage.

In Acute stage → Pat is hospitalized
to prevent harm to him
or others & treated w antipsychotic
drugs.

(6)

Anti psychotropic drugs control all positive symptoms
of the disorder.

- They have ~~all~~ Minimal effects on disorganised behavior
& Negative symptoms.

- 60-70% schizophrenics will respond to anti psychotropic.

- During Acute phase → Medication are given IM
to stabilize.

Once stabilized Anti psychotropic are long acting
called depot dose → lasts for
2-4 wks / for an advantage of
protecting the pat against
the consequences of
forgetting or daily
skipping of
Daily doses.

Antipsych/ Antipsychotics are of 2 classes.

old → Dopamine receptor antagonists :

New → Serotonine dopamine antagonists

(7)

To lower the sensitivity to sensory stimuli by blocking α antagonists which counteract the action of dopamine

Dopamine receptor Antagonists

↓ also called as

Neuroleptic drugs.

Eg Haloperidol

Chlorpromazine

Fluphenazine

Second Generation Dopamine Antagonists :

↓ also called as

Atypical antipsychotics.

Eg Clozapine

Risperidone

Olanzapine.

} Have better effect on negative symptoms.

Psychotherapy : Once their acute symptoms have been brought under control by antipsychotics

↓
Behavior therapy helps in acquiring skills for daily living & social interaction & to prepare for Employment (Occupational Therapy)

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Family therapy :

Recommended for families of schizophrenics to relieve feelings of guilt that they have.

Help them to understand pat disorder.

Many families benefit from support groups & similar help organizations for relatives of schizophrenics.

Prognosis

30% of pat's diagnosed with schizophrenia recover completely

Majority shows some improvement

Schizophrenics with high stressful changes or frequent contacts with emotionally over involved family members are more likely to relapse.



①
Peptic ulcer : is an open sore in upper digestive track.

2 Types of peptic ulcer.

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graph LR; A[2 Types of peptic ulcer] --> B[Gastric ulcer]; A --> C[Duodenal ulcer]; B --- D[forms in lining of stomach]; C --- E[which forms upper part of small intestine]
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Peptic ulcers is general term used for ulcers that occur in stomach + Duodenum.

Etiology :

GIT usually acidic

Most ulcers are known to be associated with *Helicobacter pylori* which lives in acidic media of stomach.

Ulcers can also be worsened by drugs like Aspirin & NSAIDs

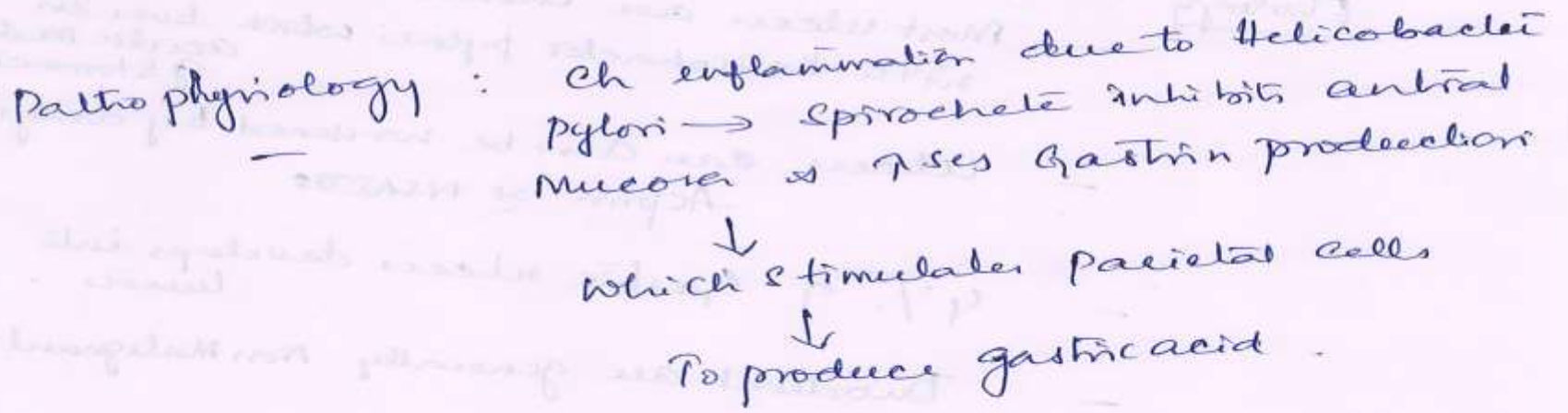
4% of Gastric ulcers develops into tumors

Duodenal are generally Non Malignant.

- Symptoms :
- Abdominal pain
 - Hematemesis
 - Melena
 - wt loss
 - Heart burn
 - Gastro Esophageal Reflux

Gastric ulcer give Epigastric pain during meal/after meal due to secretion of HCl.

Duodenal ulcers → Pain noticed before meal & subsides @ food



— Anolhu Caen . NSAIDs → Usage which blocks prostaglandins cyclooxygenase,

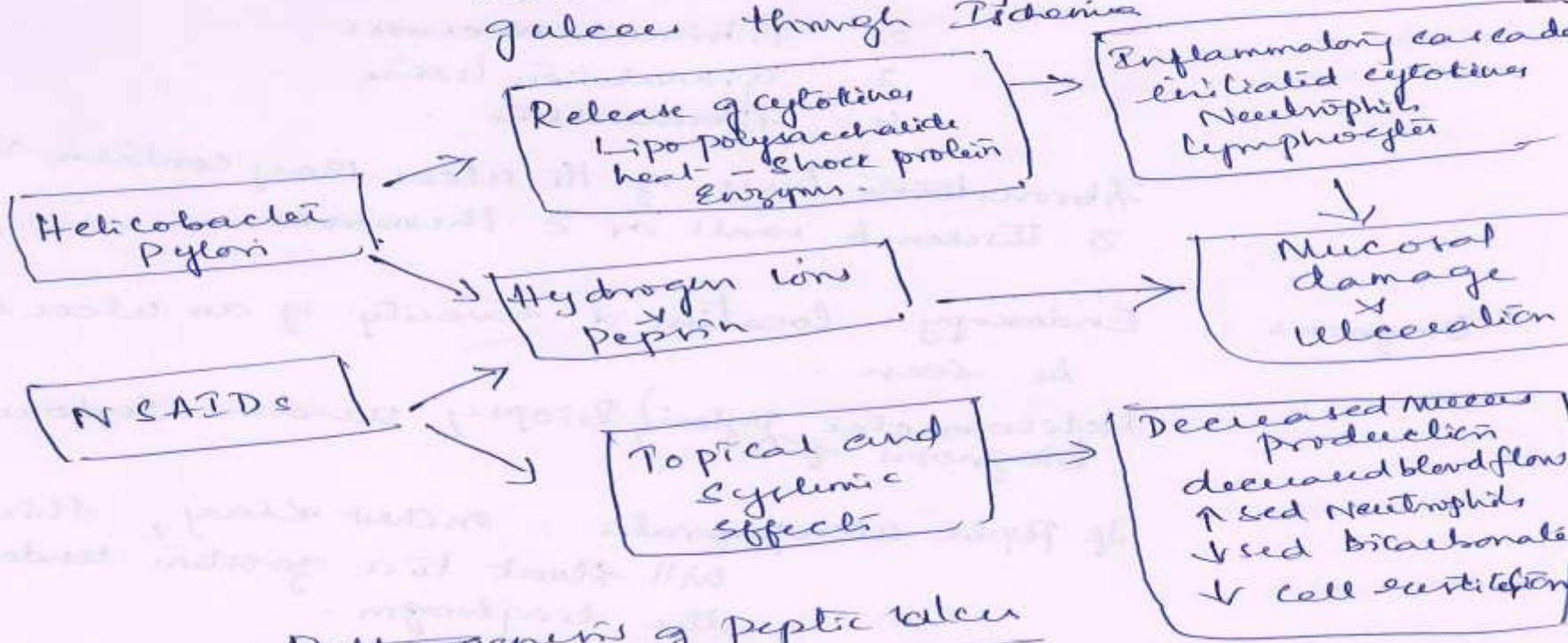
which is essential for production of prostaglandins

which protects gastric mucosa.

Burns ; Head injury → lead to stress ulcers.

Smoking → leads to vascular spasm &therosclerosis.

↓ causing
Vascular insufficiency & promoting development
of ulcers through Ischemia



Pathogenesis of Peptic ulcers

④

Macroscopically :

Gastric ulcer localized

~~As~~



on lesser curvature of stomach

Round to oval

2 to 4 cms in diameter

Microscopically :

penetrates the Muscularis Mucosae

During active phase

base of ulcer shows 4 zones.

1. Inflammatory zone Exudate
2. fibrinoid Necrosis
3. Granulation tissue
4. fibrous tissue

Fibrous tissue base of the ulcer may contain vessels
or thickened wall or thrombosis.

Diagnosis :

Endoscopy : location & severity of an ulcer can
be seen.

Helicobacter pylori } Biopsy under Endoscopy.
Diagnosis of

If Peptic ulcer perforates : on chest X-ray, this gas
will float to a position underneath
the diaphragm -

Treatment :

Antacids

H₂ antagonists

When H. pylori infection is present

combination of 2 antibiotics

Amoxicillin

Tetracycline

Metronidazole

and proton pump inhibitor → Pantoprazole

Jauendice

①

Def: Yellowish discoloration of skin & eyes caused by abnormally high levels of bilirubin pigment - in blood streams

French word *Jane* which means yellow

Jauendice is seen when level of bilirubin exceeds 2.5 - 3 mg/dl

Old & Damaged RBC are removed from circulation mainly by spleen.

Hb → Part of RBC broken down into dark greenish yellow pigment called bilirubin.

↓
Called into the blood stream to the liver & excreted into intestines as bile.

- If bilirubin is not excreted into bile quickly it builds up in blood.
- Excess of bilirubin deposited on in the skin resulting yellowish discoloration

(2)

Etiology : High levels of bilirubin in the blood

↓ result from

Problems that originate either within liver or outside the liver.

- Damage to liver due to inflammation or scarring can impair its ability to excrete bilirubin into bile.
- Bile ducts blocked by gallstone or a tumor impairs to carry bile from liver to small intestine.
- overproduction of bilirubin due to excessive breakdown of RBC cause the liver to produce more bilirubin - but it is more common in newborns.

Symptoms : Skin & Eyes - sclera white part - appear yellow.

Urine is often dark due to bilirubin excreted through kidneys.

Itching

Ac Inflammation of liver (Hepatitis) cause loss of appetite, Nausea, vomiting & fever.

blockage of bile may result in abd pain
 Jaundice itself is not a disease, but rather
 a sign of one of many possible underlying
 pathological processes that occur in normal.
 Physiological pathway of bilirubin Metabolism -

Pathophysiology :

When RBC completes their lifespan
 ↓
 Their Membranes become fragile &
 prone to rupture -

↓
 Each RBC sort traverses through
 reticulo endothelial system then its
 Membrane ruptures -

↓
 Releasing Hb into blood

↓
 Phagocytosed & split into

by Macrophages
 Heme + Globin

↓
 Protein degraded into amino acids

↓
 No role in Jaundice -

2 reactions take place δ Heme Fe

1. \downarrow Oxidative reaction by Heme oxygenase results in biliverdin, Iron & CO
2. Reduction of biliverdin to yellow pigment called bilirubin by bilirubin reductase

Diagnosis : : Lab tests
Imaging Studies all done to determine the cause of Jaundice.

Treatment : If the problem is disease of liver such as acute viral Hepatitis \rightarrow Jaundice gradually disappears.

If problem is blockage of bile duct \rightarrow Surgery to be done to reopen affected bile duct.

Hepatitis

It is a disease that affects liver causing it to swell & become inflamed

Common causes of Hepatitis include some viruses

↓
Damage liver cells → Cause swelling & prevents from functioning.

Hepatitis A virus causes temporary liver inflammation

- Least threatening among various forms hepatitis
- Does not lead to ch-liver disease
- It is mild disease illness lasting for 1-2 wks
- People recover completely

spreads → by fecal-oral route through contaminated water/food & virus by sewage
Food handlers who do not wash their hands after using bathrooms.

HAV seen in schoolage & young adults

Outbreaks more often seen in institutions, day care centers, meal areas.

Symptoms:

No symptoms in children -
Adults Dark coloured urine
light colored stools
Vomiting, Nausea, Abd pain & fever
Full Recovery → 6 months (after)

Prevention : Hepatitis^A Vaccine : A (6)

Given at an age of 2 yrs

Vaccine is recommended for those who live

- in poor sanitary condition
- IV drug users
- Homosexuals
- People who receive blood product such as Hemophiliacs.
- To adults
2 vaccine doses separated by 6 months
can give 20 yrs of protection.
- Wash hands & Soap & water after using bathrooms

Diagnosis : Infection confirmed in a blood test

Treatment : Infection disappears within a few weeks to few months.

- Immune globulin can provide temporary immunity to the virus up to 3 months.
- Very small percentage of patients in Hepatitis 'A' virus infection has recurrences within weeks to months after recovery.

Vaccination for Health care center Employees.
Laboratory workers who handle fecal specimens.

For Adults - 2 doses IM @ 6 to 12 months apart -

Children 2 - 18 yrs. 3 injections
2 doses one month apart -
3rd @ 6 to 12 months after first dose.

Hepatitis B

Very high percentage of patients with Hepatitis 'A' virus infection have seroconversion within two to months after recovery.
Very high percentage of patients seroconvert to the virus up to 8 months after onset of symptoms.
Symptoms disappear within a few weeks to few months.
Infection confined to a blood vessel.

Diagnosis
Treatment