

Kumar tower
{ 8000
+ 9000
17000 }
Vardhman
Classes.

Disease

Dis + ease.

Congenital.

(By gene & chrms)

* Aids is not congenital

b/z Sperm + ovum

में नहीं होते

अतः mother में

foetus में Transfer

होता है।

Acquired.

Infectious.

ex:- common cold.

AIDS.

Non-Infection

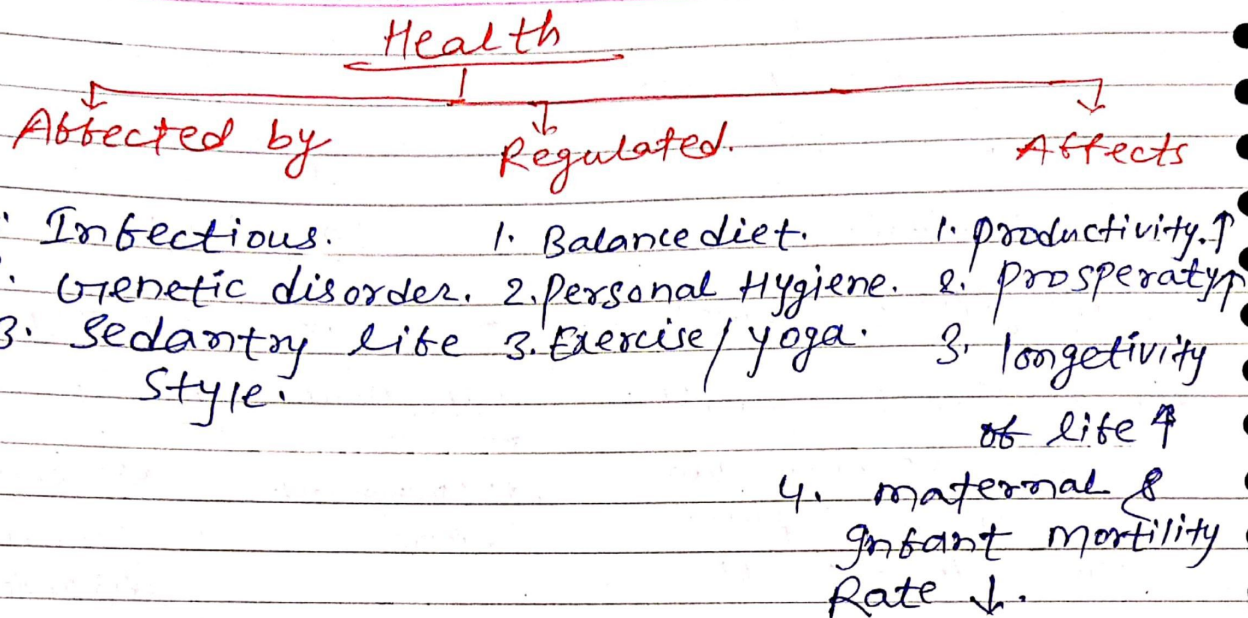
ex:- cancer.

→ Hormonal
disorder.

→ Vitamin
deficiency.

* All communicable diseases are infectious
But all infectious diseases are not
communicable. ex:- Tetanus.

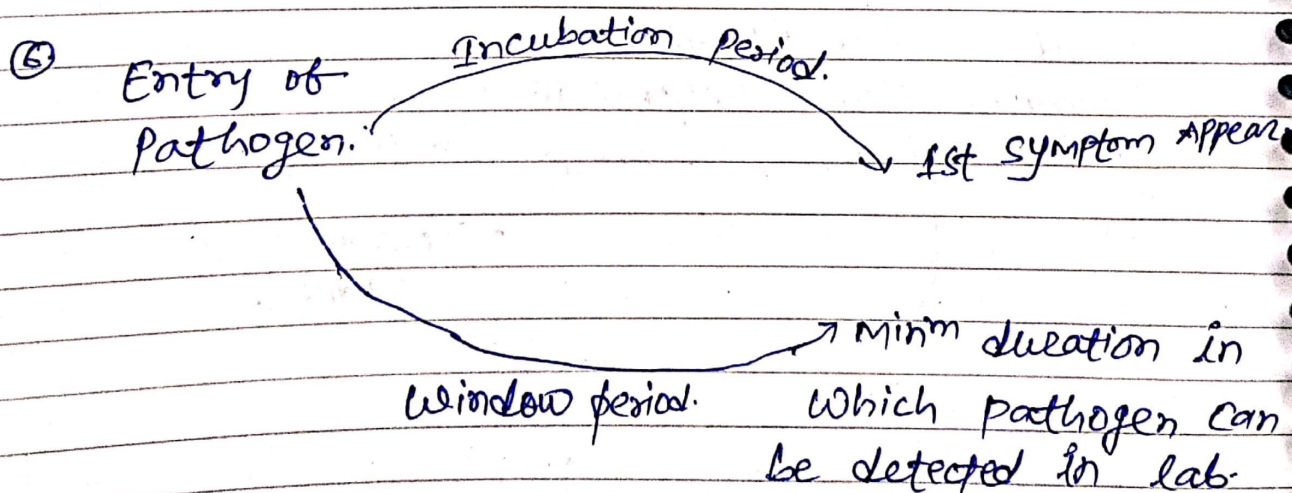
Good
Humor.
Hypothesis {
1. Blood.
2. phlegm (मूत्र)
3. Bile (पित्त) → Good.
→ Bad.
(Black).



* prophylaxis → (Disease होने से पहले उसके आसार को उपाय)।

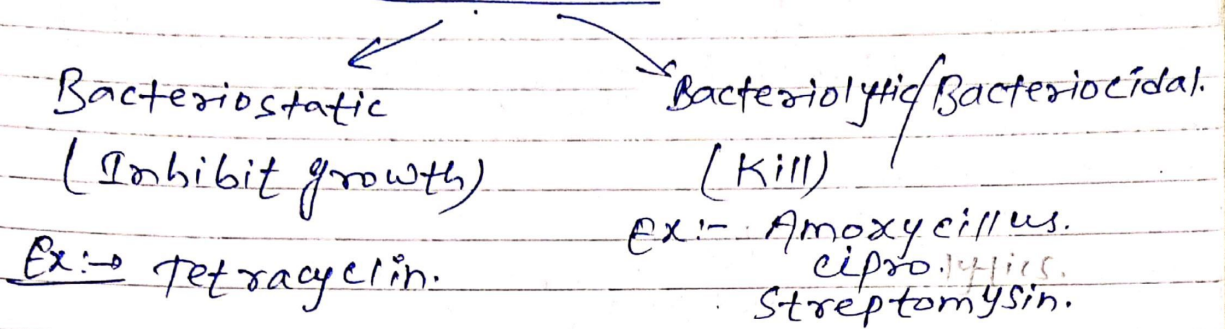
* Etiology → Study of cause of disease.

* Epidemiology → Mode of Transmission.



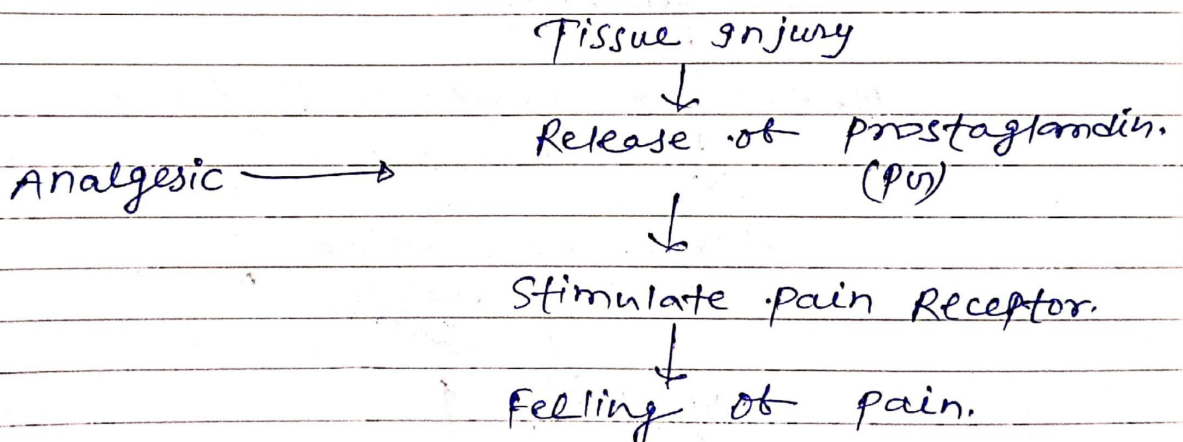
Normally → $W.P > I.P$
AIDS → $W.P < I.P$

Antibiotics are Bacteria
or Against but not virus
ने और कोई Bacteria attack न करें तो doctor के मत / so common cold
है ही Antibiotic के दवा है।
Antibiotics.



→ first discovered antibiotic → penicillin.
→ " " Bacterial " → ciprofloxacin.

Analgesic → (Painkiller).



Ex: →

- 1. Nimusulide.
- paracetamol.
- Diclophenac Sodium.
- " Potassium.
- Aspirin.
- opiate derivative (Morphine) → 52118T 245
5707 42

Aspirin



Platelet Aggregation. (inhib, prostaglandin)

Antipyretic

(Antifebrile)

pyrexia = fever

Entry of pathogen.



Release of Toxin.



Hypothalamus.



Release of prostaglandin (P_g)

↓ Stimulate.

Temp. Regulating
Centre activity ↑



Body temp ↑

- 1) paracetamol (1st choice of drug)
- 2) Nimusulide.
3. Best method → Sponging.
to reduce pyrexia.

NOTE:- ☺

* All Antipyretic Acts as Analgesic
but all Analgesic ^(x) does not acts
as Antipyretic.
↓
morphine

* Receptor for morphine on hypothalamus
are not present.

* Antihistaminic
(AntiAllergic)

Antihistaminic Drug

Histamine receptor

Blood vessel.

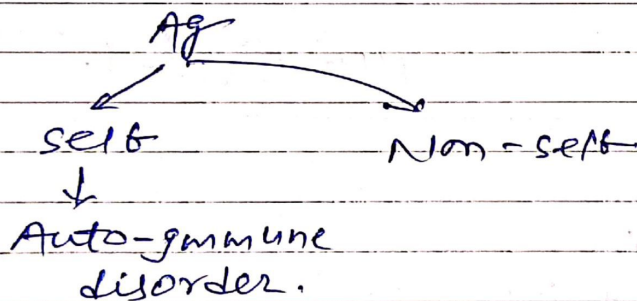
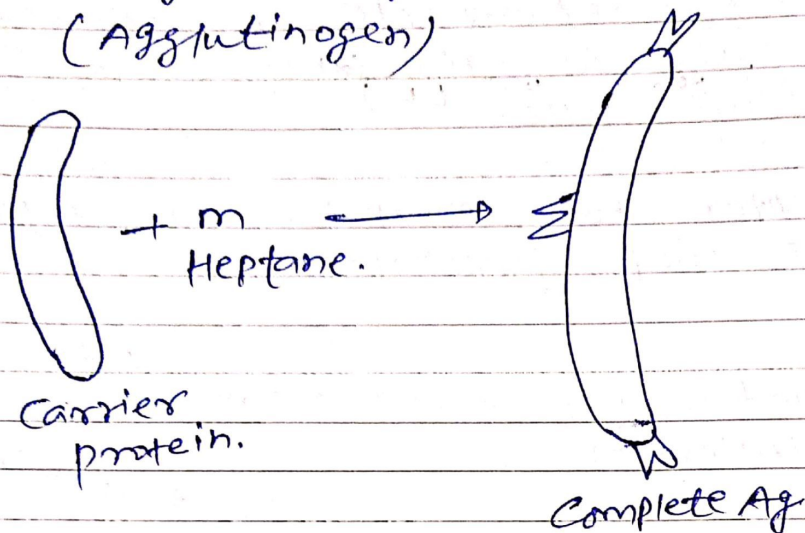
ex:- avil.

→ cetrizin

→ levocetrizin.

* Antibody is
glycoproteinous
substance.

(i) Antigen $\rightarrow$ Ag
(Agglutininogen)



* $Ag + Ab = Agglutination.$
 $\downarrow$
Serology.

Blood - corpuscle = plasma.

Plasma - fibrinogen = serum.
(clotting factor)

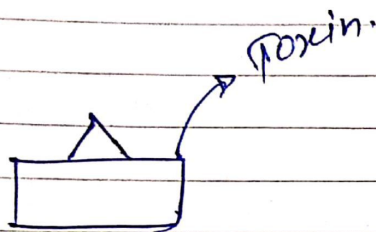
performed $Ab + serum = Antiserum.$

(96) →

SF A2A → 10P/S → (27)
(8T) → [* 121 * 51 # 1]

ATS = Anti^o Tetanus Serum
ADS = " Diphtherial "
ARS = " Rabies "
AVS = " Venum "
ASV = " Snake Venum.

Toxoid



Exotoxin

↓
Detoxicity

↓
used for Antigenic property.

↓
formation of Ab.

Ex: →

TT = Tetanus Toxoid

DT = Diphtherial "

BT = Botulism "

↑↑
Clostridium Botulism.

(Food-poisoning)

✓ (effect in nervous system)

* Tetanus & other TT are injectn
initially & ATS are of
emergency #1

Cytokine

1. WBC Interleukin. → WBC
2. lymphocyte Lymphokinin. → lymphocyte.
3. Monocyte/
macrophage monokinin lymphocyte.

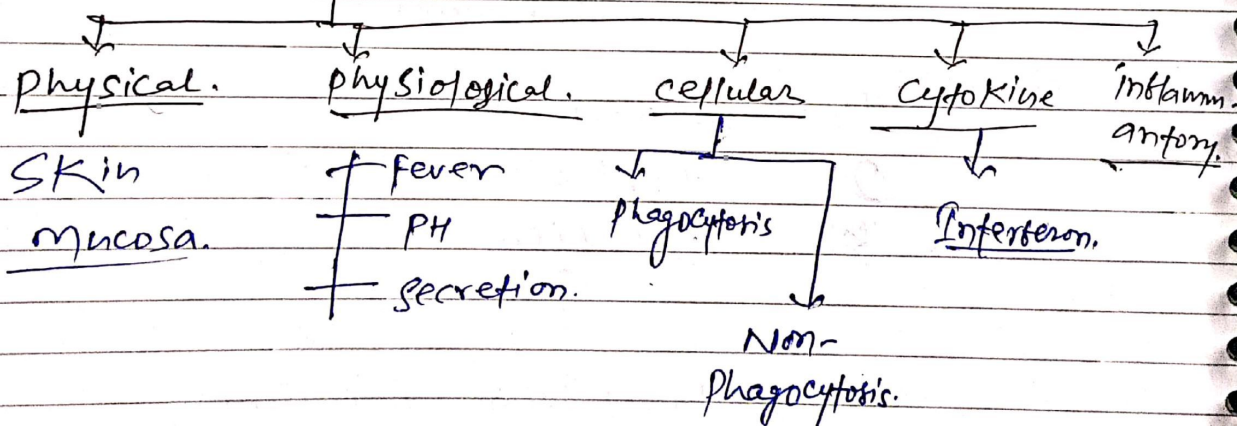
Immunity

Innate

Acquired.

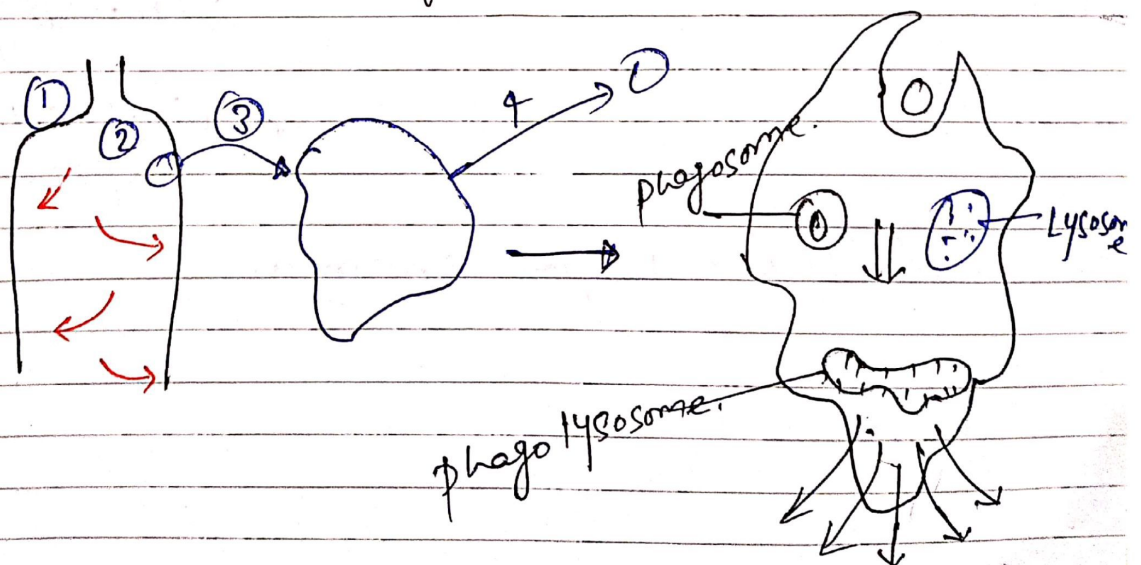
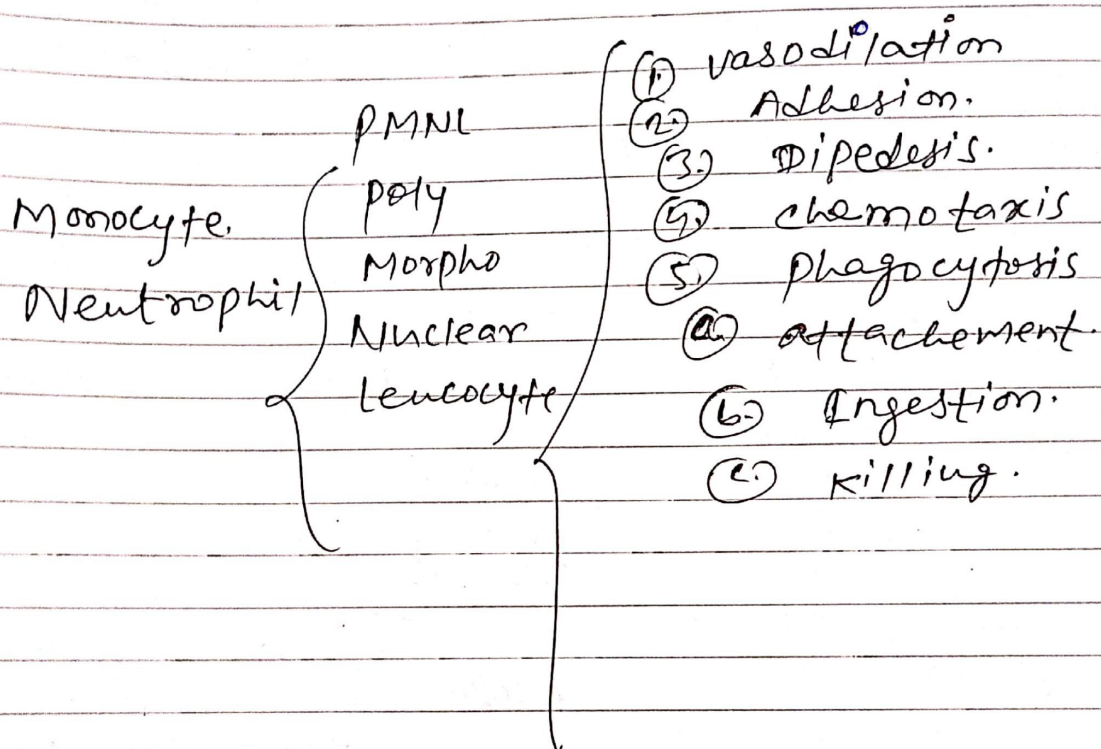
→ 1st & 2nd line of defense.

→ Non-specific.

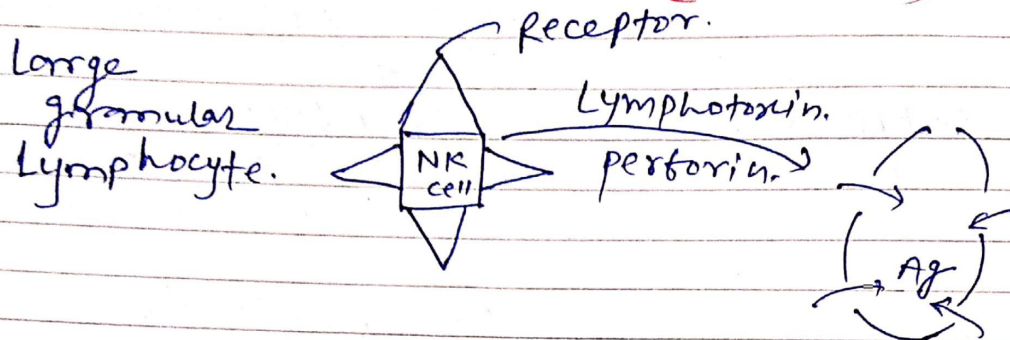


→ Glycogen 2nd NT liver & 2nd muscle
store & NT &

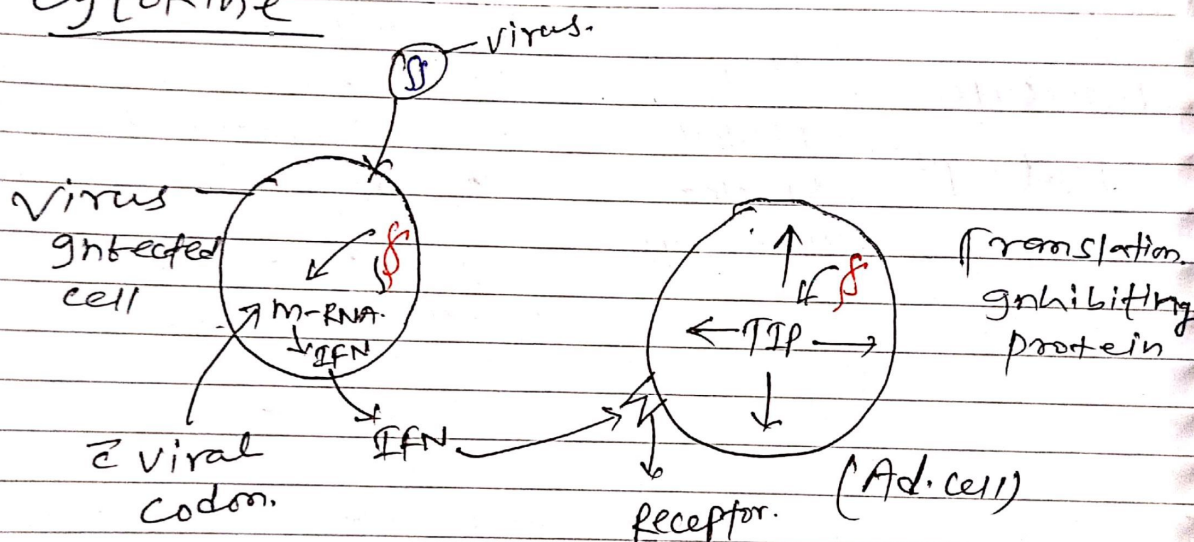
Helicobacter pylori.
Lactobacillus (In vaginal wall)
Acidophilus.
Glycogen. → Lactic Acid
(4.5)
PH



Natural Killer cell (NK cell)



Cytokine

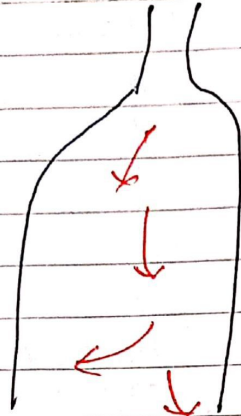


IFN $\rightarrow$ species specific
and virus Non-specific.

Δ -IFN = Kaposi sarcoma.

Fever is Beneficial for our Body But we minimize it b/c some enzyme get dehydrate (degenerate) in high temp.

Inflammation

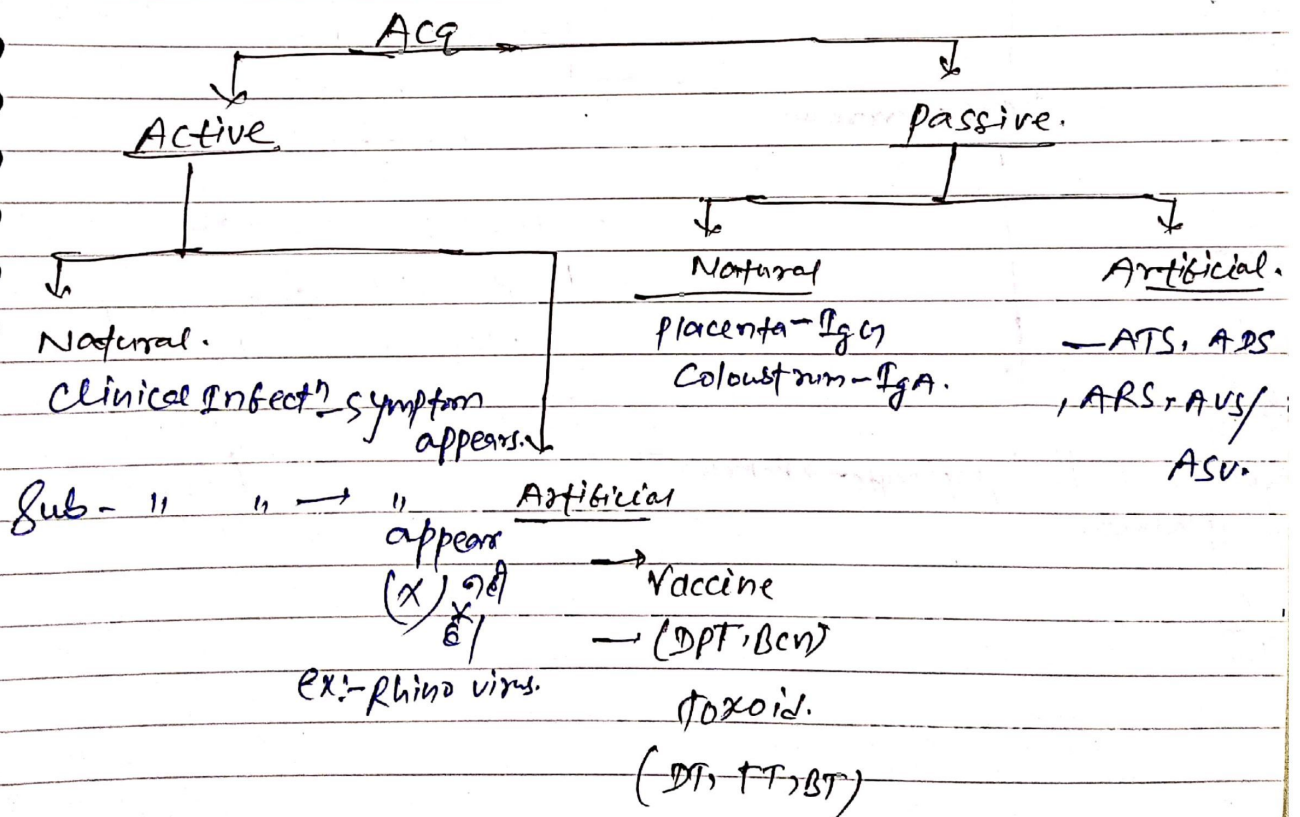


Redness = Rubor.

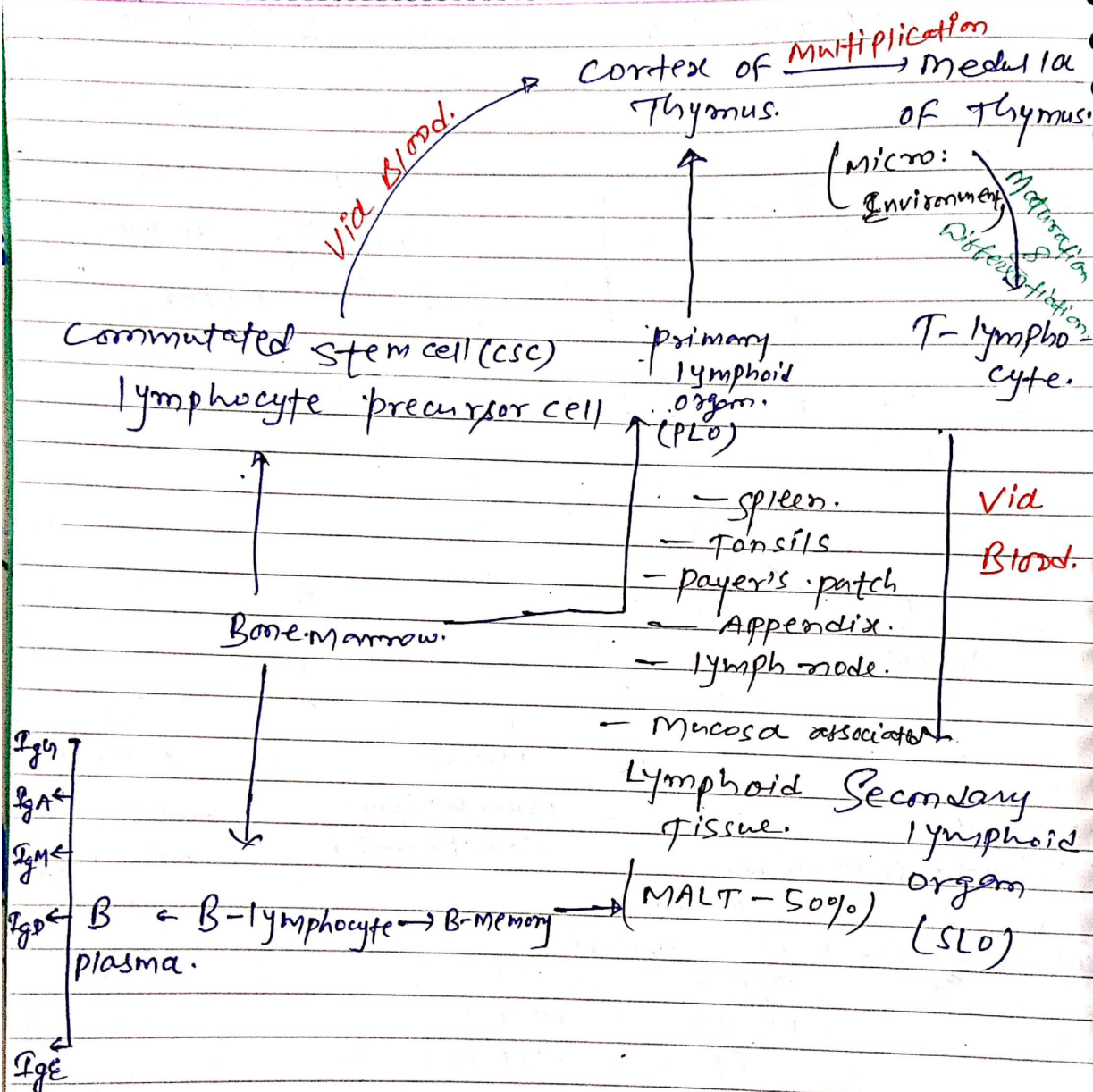
Temp = calor.

Swelling = Tumor.

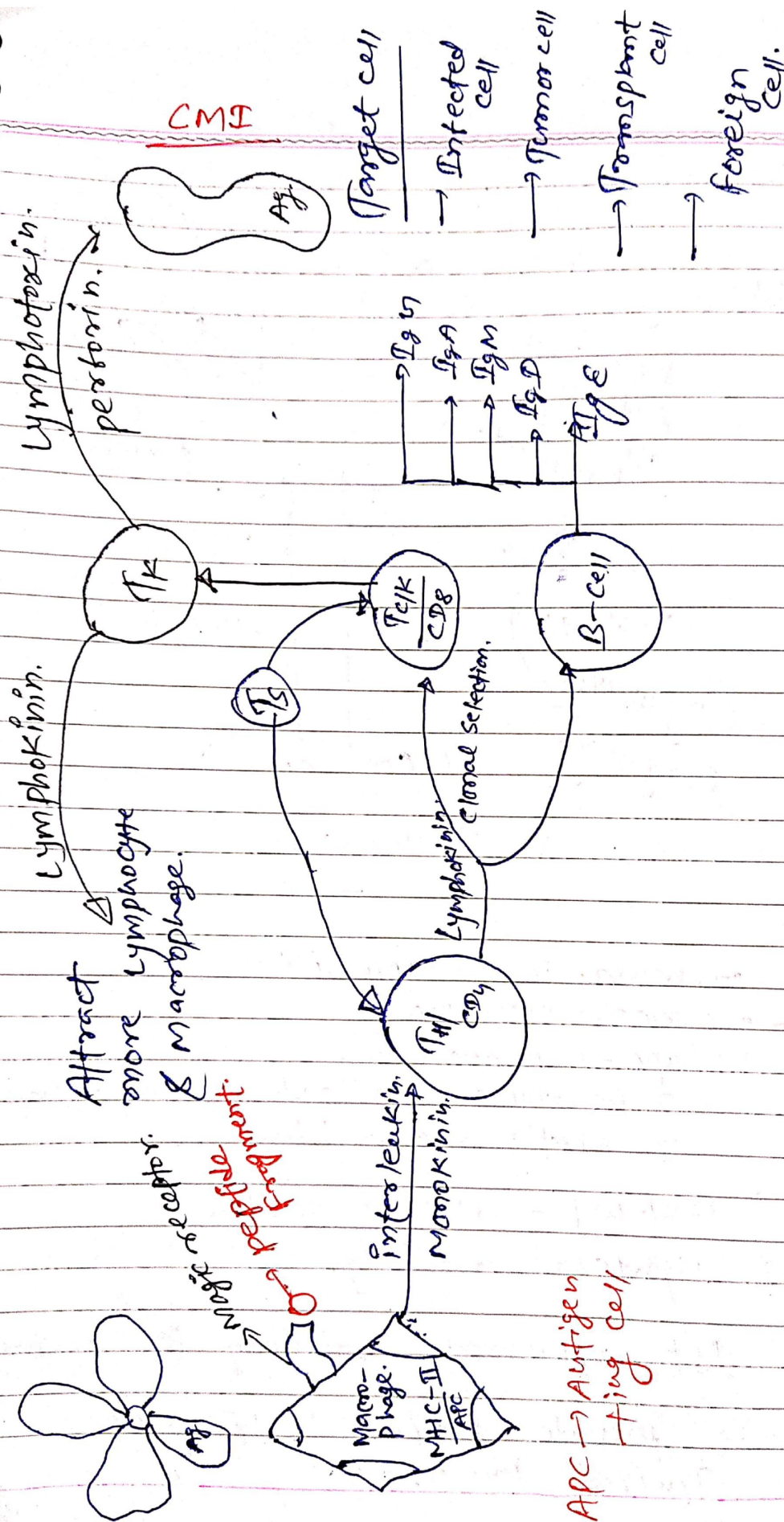
pain = Dolor

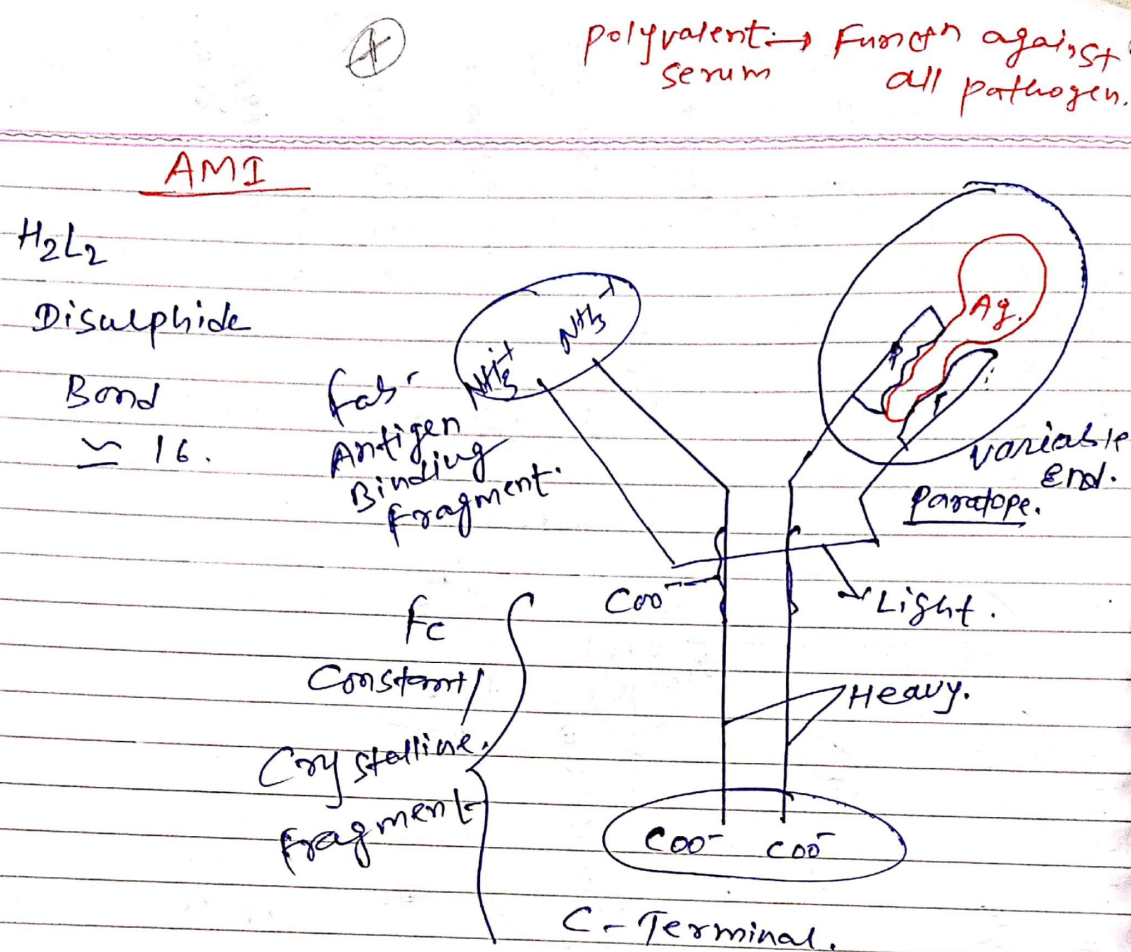


Lymphoid organ



* B-lymphocyte - Bursa of Fabricius
T-lymphocyte - Thymus.

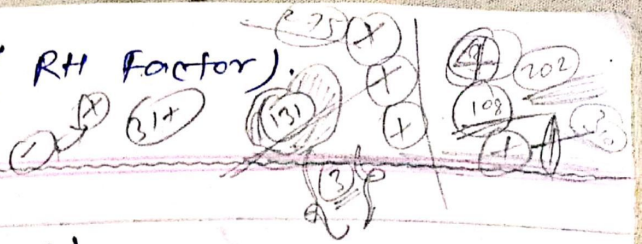




- IgG $\rightarrow$ gamma-immunoglobulin.
- $\rightarrow$ concn $\rightarrow$ 75-80%.
 - $\rightarrow$ Shape $\rightarrow$ monomer.
 - $\rightarrow$ 2 paratopes available at a time
2 antigen can bind.
 - $\rightarrow$ mol. wt - 1,46,000 dalton.
 - $\rightarrow$ lightest antibody.
 - $\rightarrow$ 1st appeared antibody (in foetus).
 - $\rightarrow$ It provide Natural passive acquired immunity.

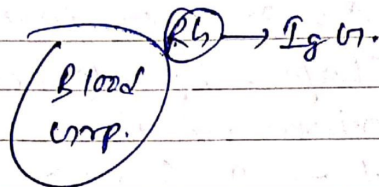
2 months after
embryo
at 12 wks of foetus.

+/- (RH Factor)
+nt -nt.



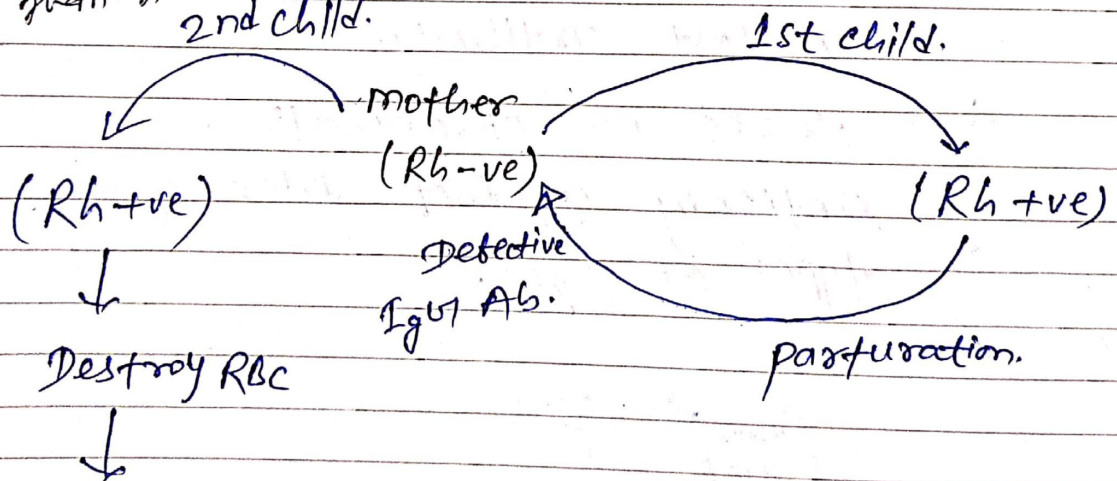
helps in opsonisation.

- most abundant antibody.
- Also called universal anti-body.
- Antibody Against RH factor is type of IgG.



* Erythroblastosis Foetalis :->

3rd child (Rh-ve)
then no effect.
2nd child.



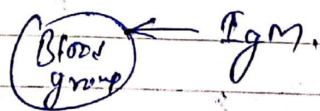
Haemolytic
Anaemia.

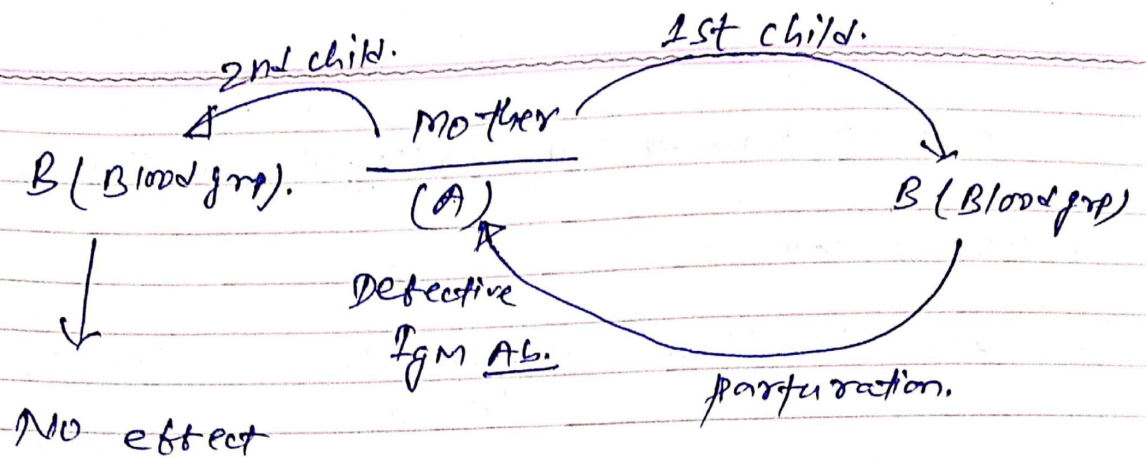
1st parturition = 72 hr = mother

↓
Rhogam inject
(Anti-D) inj.

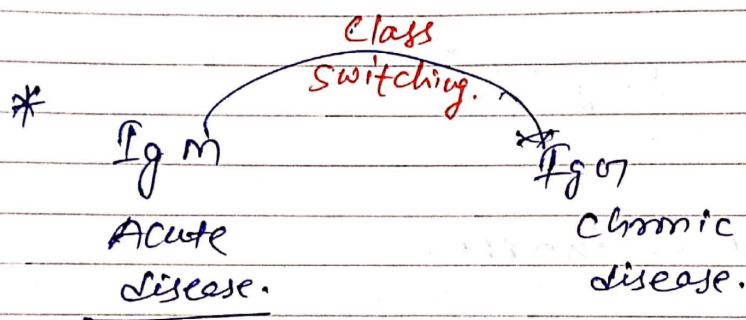
IgA → α -immunoglobulin.
→ concn → 10%.
→ Shape - Diamond. Widmer.
paratope → 4
→ Secretory Antibody.

IgM → (u) concn → 5-10%.
Shape → pentamer.
paratope → 10
mol. wt → 9,60,000
Heaviest-antibody.
→ million Antibody.
→ 1st formed Antibody
→ oldest antibody.
→ Helps in opsonisation.
→ Antibody against Blood-group is
types of IgM.





(BZ can't cross placenta due to heaviest antibody).



* IgD $\rightarrow$ J - immunoglobulin.

- Conc $\rightarrow 1-3\%$
- 2 paratops available.
- Shape - monomer
- Activation of B-cell

* IgE → E₀ - antibody
 concn → .05% (least concn)
 Shape - Monomer
 2 - paratopes

→ also known as allergic antibody.

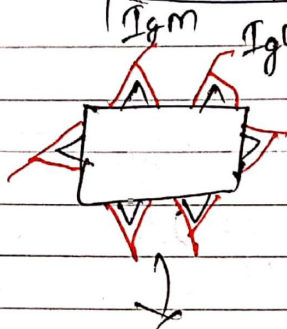
Function : →

Agglutination.



→ cell-lysis.

Opsonisation.



phagocytosis.

Neutralisation

→ Neutralisation
of
Toxin.

Acquired & innate.

CMI > AMI > innate.

→ Foreign cell Foreign cell.

→ Infected "

→ tumor "

→ Transplant "

* Most abundant antibody in Blood - IgM
" " " → IgG.

Vaccine :-
Principle :- Immunological memory.

(2) First generation vaccine :- when whole pathogen in form of weak/liver killed form is injected in our body.

(1) Live attenuated :-

Like

→ HCHO

→ β - propionlactone

when pathogen is treated with some chemical, then pathogen is converted in weak positn this process is known as atteneuation.

Ex:- Small-pox. (२५५)

→ OPV (oral polio vaccine) (Saline)

→ Rotavirus.

→ BCG (T.B)

→ MMR (Mumps Measles Rubella)

→ pathogen is killed By hot fermentation process.

Ex:- pneumonia.
Influenza.
Rabies.

TAB

IPV (infected polio vaccine)
(Salk)

→ Spread by contaminated food and water
oral polio vaccine preferred as it is
b/c of body's physiological effect
it enters the stool of child &
gives rise to immunity against
polio - develop as (NF &)

2nd generation vaccine :-

Desired gene $\xrightarrow[\text{Plasmid}]{\text{vector DNA}}$ Transgene $\xrightarrow{\text{Transfer in}}$ Transgenic
Bacteriophage. Micro-organism
(E. coli, yeast)

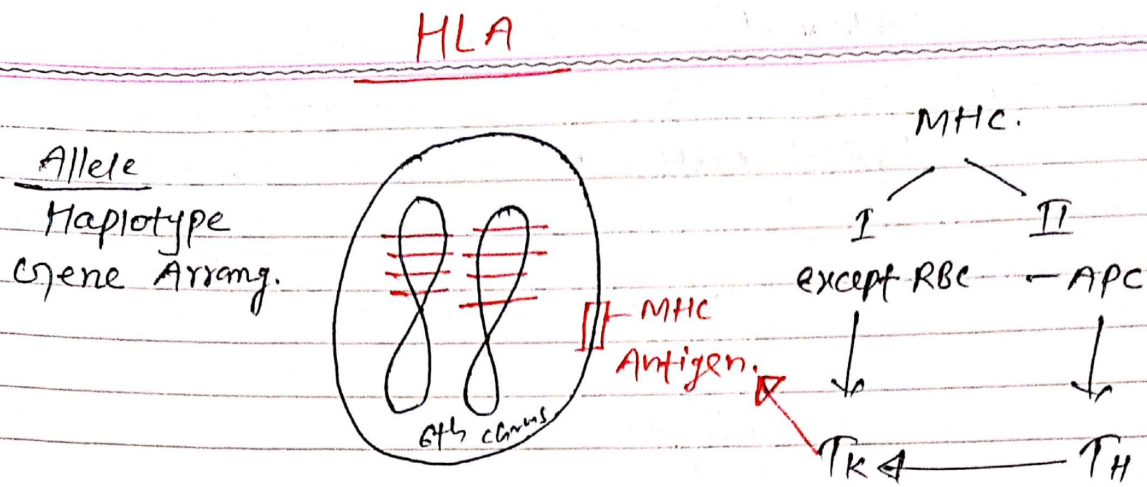
Recombinant DNA technology
Ex - Hep-B

Vaccine $\xrightarrow{\text{extract}}$ Recombinant protein.
Antigenic polypeptide.

Culture
Media.

* 3rd generation vaccine is
also known as DNA vaccine.

Ex:- Leukemia virus.



→ Due to Rebre. Index we can't
take other animal cornea. (Avascular)
B/2 our eye R.I is different
from other animal

Asthma-Inhaler

Allergy & Hyper sensitivity.

IgE + mast cell



Histamine.



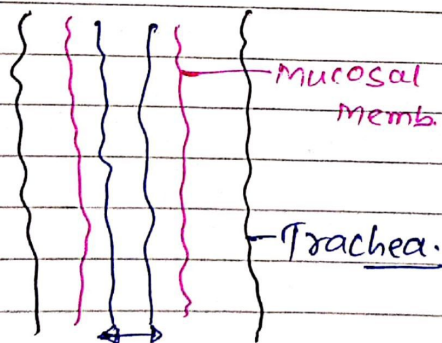
Vasodilation.



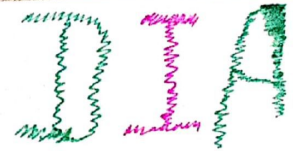
Infection.

<u>Allergen</u>	<u>Antigen</u>
→ AMI	→ AMI & CMI
→ It may be or may not be proteinous	→ It is proteinous.
→ Same species different effect.	→ Same Species same effect.

ASThma :-



- Histamine → Vasodilation.
- Serotonin → Bronchoconstriction.



Symptom:-

1. Difficulty in Breathing.
2. Whistling Sound.
(During expiration)

Treat →

1. Bronchodilator (Salbutamol)
2. Antihistaminic.
3. Steroid.
4. Antibiotics.

2> HEY- FEVER → pollen grain.

Symptom → Running nose.
→ fever.
→ conjunctivitis.

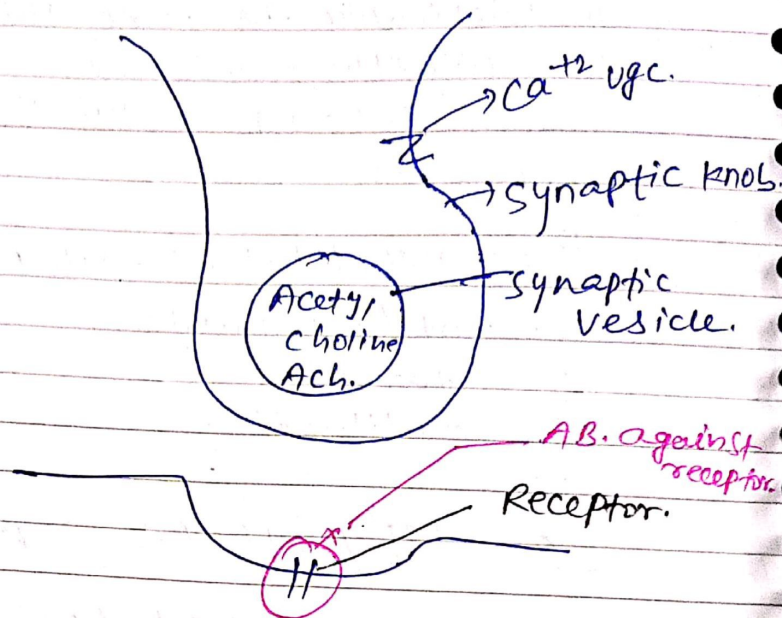
Treat → Anti Allergic
— Steroid.

A.S — Sy. BP ↓ (immediately)

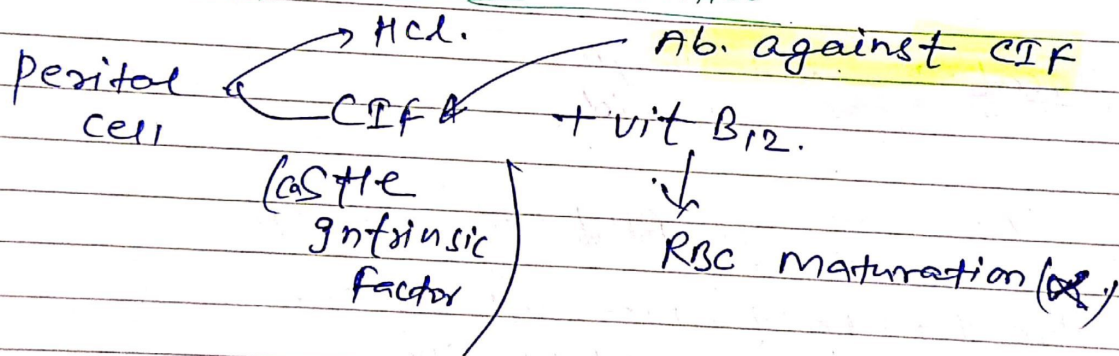
Treat → fast - Normal saline.
injection - Adrenaline.
→ Dopamine.
→ Anti histaminic
→ Steroid.

Auto. immune.

Ts
M
P
I
H
M
R



pernicious anaemia.



Treat → inject vit B₁₂.

4 - CIF → 4 vit. B₁₂

4 - रीटी → 5 vit B₁₂ = 20 vit B₁₂

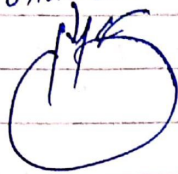
But when Freq 4.

1 रीटी = 5 vit + 1 रीटी + 1 रीटी

4 absorbers vit B₁₂. 4 absorbers. 4 absorbers.

IDDM →

gmp ✓ β -cell & AG. against.
of pancreas
glucose.



Normally

✓ 1. 80-120 mg/dl.

2. 120-80 mm of Hg.

3. If 180 or more glucose & than
Kidney can't filter it.
and glucose come
through urine.

→ Glycosuria.

• Diuresis.

(water loss). > polyuria

polydipsia.

polyphagia.

Ketone bodies

→ Acetone.

→ Acetoacetic acid.

→ β -hydroxy Butyrate

→ keto-
acidosis.

4. Hashimoto Disease

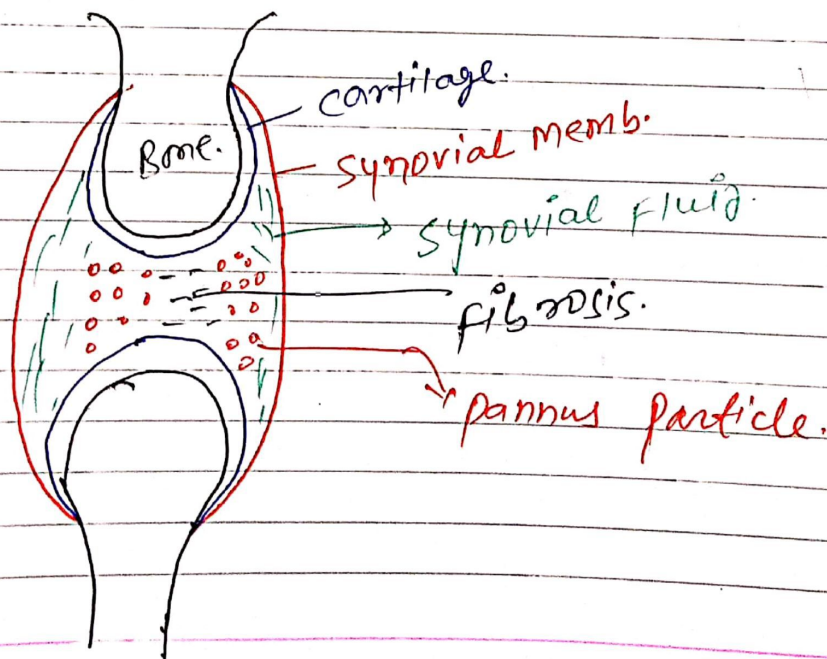
Suicide of Thyroid.
Auto immune (thyroiditis).
✓ thyroid cell $\rightarrow$ Ab. $\rightarrow$ T₄ ↓
(Hypothyroidism).

5. Multiple Sclerosis.

✓ Ab. Against
myelin sheath.



* Rheumatoid Arthritis (राइमाटॉयड):



His → swelling

Treat → weight loss and painkiller drugs. Betnisole

Streptococcus Haemolyticus.

→ IgM type AB = Rheumatic Factor.

* SCID

B-Lympho
(AMI)

T-Lympho
(CMI)

Maturation.

defect → ADA Enz.

Treat → Gene therapy.

Immunomodulator : →

Response → fast

Resp - slow.

Immunopotent.

Immunosuppressant.

Ex: - IL

→ Interferon

→ Antisera.

→ T.N.F. (Tumor
Necrosis factor)

(N.K cell, platelet)

Ex: - cyclosporin - A.

Genetic disease

↓
Gene-mutation.

↓
Autosome.

↓
Recessive.

1. Phenyl Ketone urea.

2. Alkapton urea.

3. Albinism.

4. Tay Sachs's.

5. Thalassemia.

6. Sickle cell-
Anemia

7. Cystic Fibrosis.

↓
Sex-chroms.

↓
Dominant.

1. polydactyly.

2. Brachydactyly

3. Achondroplasia.

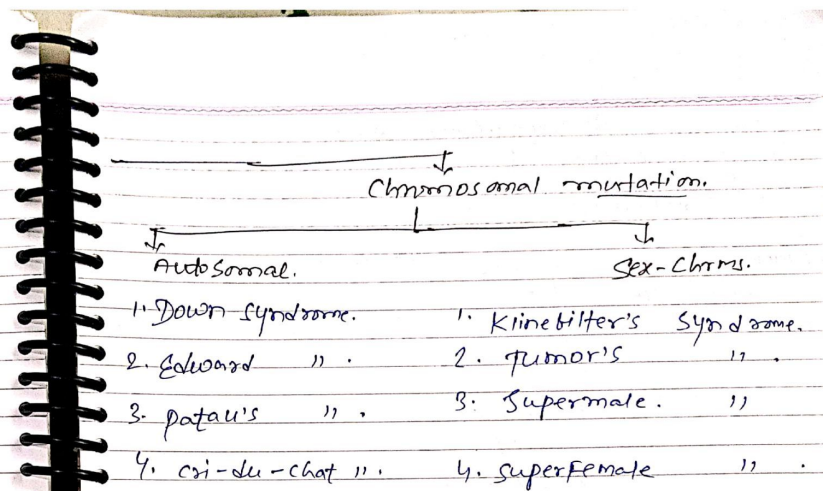
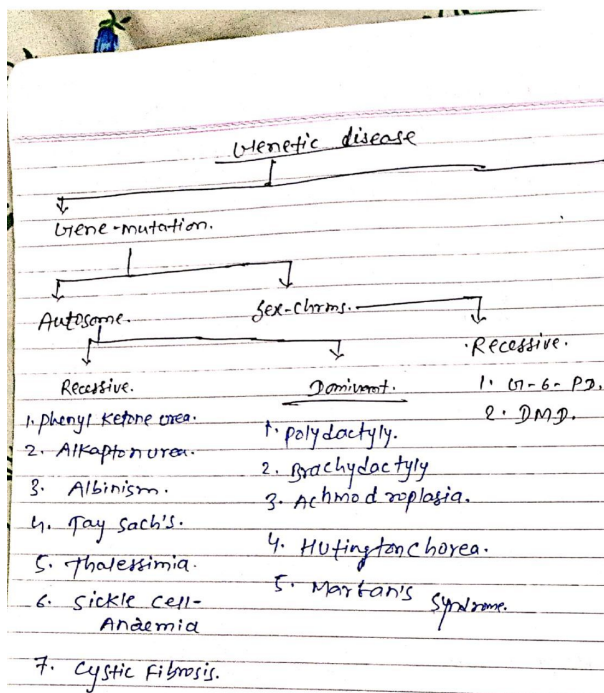
4. Huntington chorea.

5. Marfan's
Syndrome.

↓
Recessive.

1. G-6-PD.

2. DMJ.



imp. enzymes name.

Phenyl
Ketone
Urea. $\rightarrow$

Phenyl
alanine
 $\times$ alamine
 $\checkmark$ Hydroxylase.

Phenyl alanine Amino-Acid (PAAA)

Black urine

diseases $\rightarrow$
(Alkaptonuria)

Homogentisic
oxidase.

Tyrosine

Tyrosinase $\times$

melanin.

(Albinism).

Homogentisic
Acid.

(Alkapton)

Pay sach's $\rightarrow$

$\checkmark$ Lysosomal enzyme Defect).

Conjugated
Fat.

$\checkmark$ N-AHA.

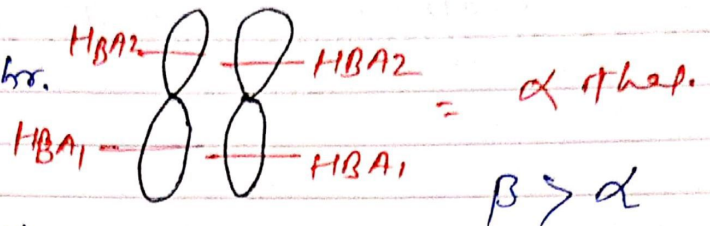
Simple
Fat.

Thalassemia

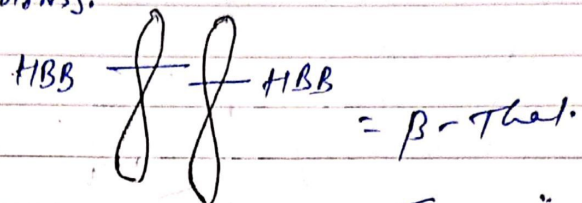
Codley's Anaemia.

$\alpha_2\beta_2$

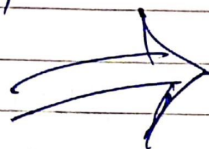
α -chain = 16th chr.



β -chain = 11th chr.



TAT ~~X~~AT TAT
TAT ATT AT
Frame shift
mutation.



Normal
RBC



Microcytic RBC

Surface
tension.

For Homozygous (Biconcave)
Shape

Treatment

→ GTR - GTR Blood transfusion

→ or Bone marrow Transplantation.

Sickle-cell anaemia

→ autosomal recessive disease.

β -chain = 11th chrm - ①-②-③-④-⑤-⑥-⑦

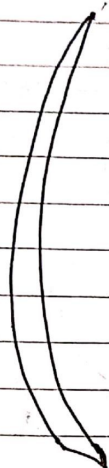
↓
Glutamic acid.

(Replace by)

↓
Valine.



Normal RBC.



Sickle RBC.

plasmodium
falciparum

↓
Resistant.

Cystic Fibrosis

→ Gene fault on 7 chrm. due to expression
of gene fibrous protein form
which deposit in different
Body parts & lungs.

Autosomal dominant

Polydactyly : → No. of digits increase. ^{More finger in hand or legs.}

Brachydactyly : → size " " decrease (small).

Achondroplasia : →

due to expression of gene chondro protein is not found due to this person become Dwarf.
(Asymmetrical dwarf)

Huntington Chorea : → 4th

^{gene}
HAB +nt on Both Chroms due to mutation secretion of HABA ↓ es and involuntary contraction starts in voluntary muscles. (गिरात हात और शरीर से)

Marfan Syndrome.

Bone

eye

Heart

Long extremities.

myopia.

Bicuspid protapse.

Arachnodactyly

LDH-6-PD

Glucose 6
Phosphate
Dehydrogenase.

RBC

LDH-6-PD
Stability of RBC.

irritant

→ penicilline.

→ sulpha.

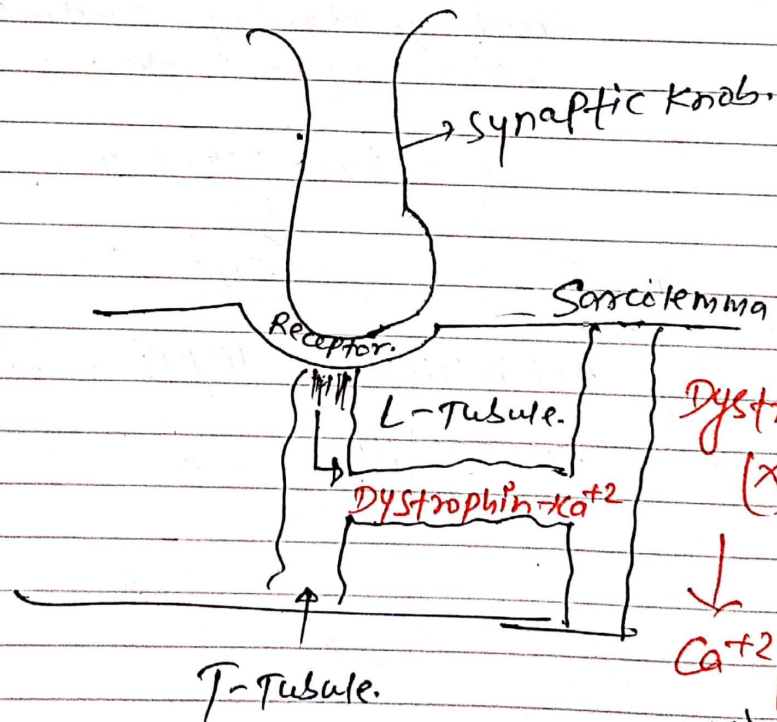
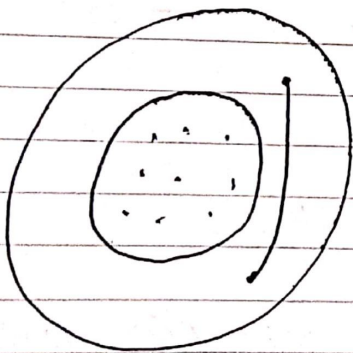
→ quinin.

→ fava (ફેવલ) & M

↓

Favism

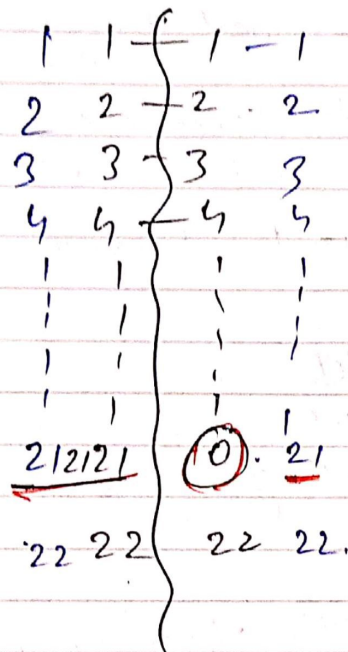
DMD



Chromosomal Mutation:-

Trisomy > Monosomy > Tetrasomy.

most affected organ = Brain.



Down-Syndrome.

21st chrom. Trisomy.

Incidental rate = 1/500.

most common.

Abnormal ovum
+
Normal sperm.

OR

Abnormal sperm
+
Normal ovum.

Down-Syndrome.

(male + female) 21st chr

Autosomal 21 18
18

Symptoms:-

- Short height
- flat forehead.
- flat nose.
- Extra epicanthal fold in eye lid.
- forked tongue.
- cardiac defect.
- palm/simian crisis.
- Doesn't perform Routine work.

Test:-

Chorionic
villus
sampling.

Edward (18th chroms.)

I.R = 8000-1

Symptoms

1. microphthalmic.
2. microcephalic.
3. micrognathus.
4. Can perform Routine work.

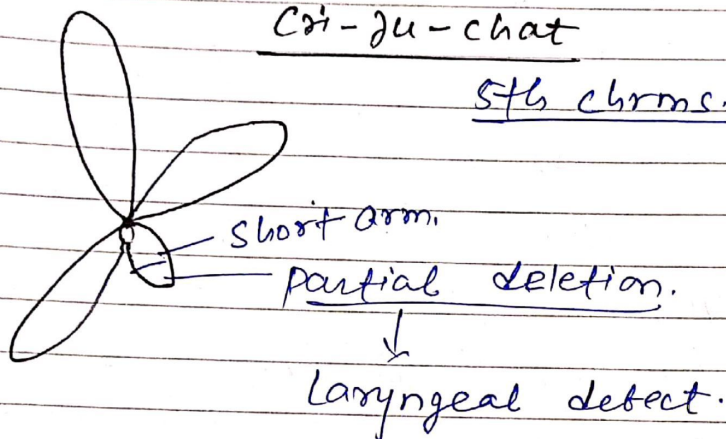
Patau's Syndrome.

13th $\rightarrow$ Trisomy.
1500-1

1. Microphthalmic.
 2. Microcephali
 3. Cleft palate.
 4. Mentally Retarded.
- can perform routine work.

Cri-du-chat

5th chrm.



Klinefelter (Male)

♀	♂
22+xx	22+y
22+x	22+xy

Trisomic = $47 = 44 + xxy$ BB=1

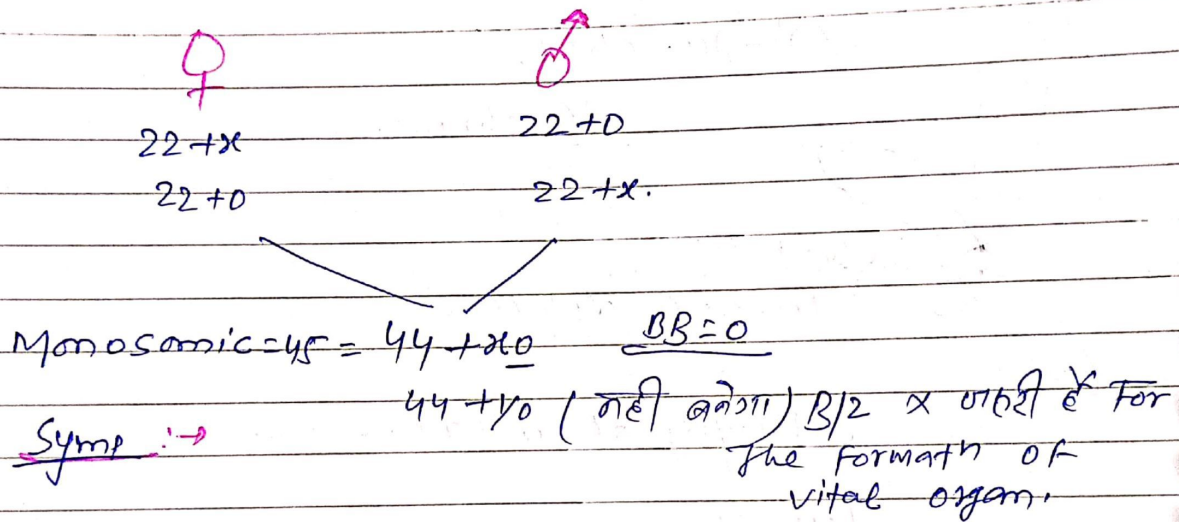
Tetrasomic = $48 = 44 + xxxy$ BB=2

Barr body
Total no of X chrms
= 1.

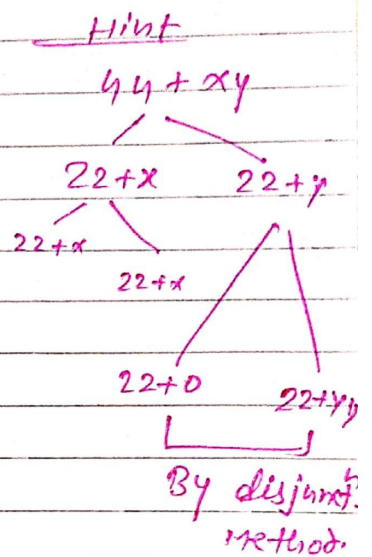
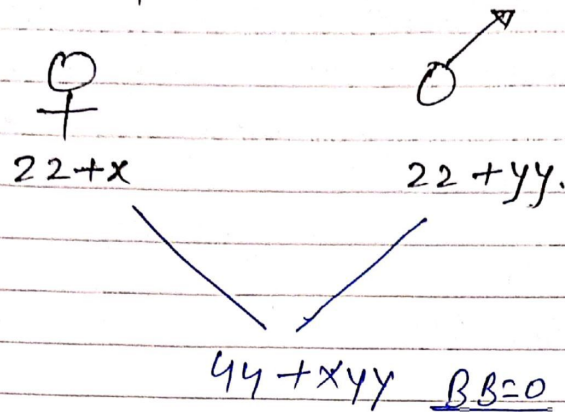
Sym →

1. Hypogonadism.
2. Gynecomastia.
3. Impotent. (एगुसि)
4. Sterile.

Turner Syndrome [in female].

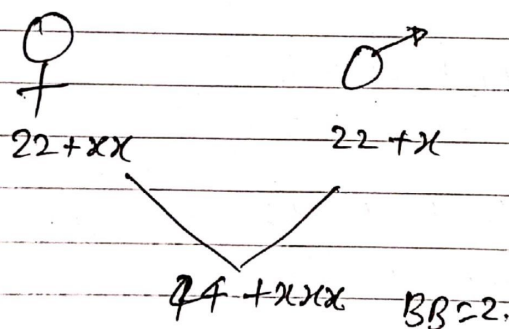


Supermale



Symp :- Muscular develop.
Macrogenitosomy.
Aggressive.
Criminal bent of mind.
Highly fertile.

Superfemale syndrome.



Symp → feminine ch. f
M.C irregular.
Highly fertile.

Bacterial

D - Dysentery.

D - Diph.

P → pertussis.

T → Tet.

P → Pneumonia.

P → plague.

T → Typhoid.

T → Tuberculosis.

C - Cholera.

L → Leprosy.

Dysentery (दysentery)

C.A. (causing agent) = *Shigella Dysenteriae*.

MOT

(Mode of transmiss) = Contaminated food & water.

SOI (Symptom of infectn) = Intestine.

Symptom → Stool with mucous.
With Blood clot.

Treat → Electrolyte
Antibiotics.
or normal saline.

अमण्डल / दमण्डल

2. Diphtheria (अक्षरिणी)

C.A = *Corynebacterium dip.*

MOT → Droplet infectn.

Airborne.

SOI = Upper respi. Tract.

Sym = Difficulty in Breathing.
= Suffocation.

Test = Schick Test.
Throat swab test.

Treat → prop. = DPT.
(Diphtheria, Pertussis, Tetanus).

Treat → ADs
(Antibiotics)

3. Pertussis C.A - *Bordetella pertussis*.

Whooping Cough
100 day Cough.

हिल्ल-काँह

हिल्ल-हिल्ल

सोर काँह

MOT = Droplet (Air Borne)

SOI = U.R.T.

Sym = Coughing Bouts
Cough Vomit.

Treat prop. → DPT Vac.

Treat → strong cough suppressant.

→ Codein Syrup.

→ Antibiotics.

4. Tetanus C.A = *Clostridium tetani*.
Anaerobic facultative bact.
Dust & Rust
Toxin = Tetospasmin.
SoI = voluntary muscle.
I.P = 6 — 10 day
↳ 8th day disease.

Sym → Jaw lock — Risus sardonius.
Bow shape = opisthotonus positn.
Mortality rate = 40-50%.

Treat → prop — DPT
Treat = ATS
TT.

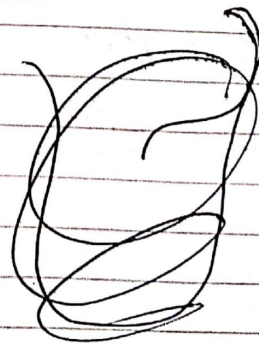
5. pneumonia.

C.A = *Streptococcus pneumonia*.
Diplococcus pneu ..

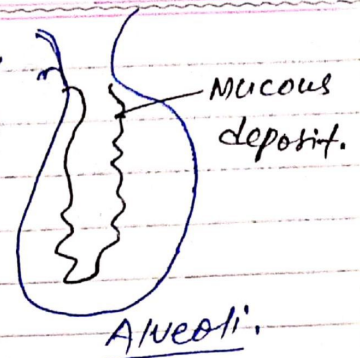
~~Haemophilus influenzae.~~

MOT = Droplet (Air Borne)
SoI = Lower R.T.

Sym = Gas exchange ↓
Lips & eye turn Bluish
or greyish appearance
→ fever, headache.



Treat - prop $\rightarrow$ pneumococcal vac.
Treat $\rightarrow$ Antibiotics.



6. Plague $\rightarrow$ vector Borne disease.
(Black death).

Rat
 $\downarrow$
Rat Flea - *Xenopsylla cheopis*.
 $\downarrow$
Pasturella pestis /
Yersinia " .

Sympt $\rightarrow$ Lymph node = Bubonic plague.

1st SOI $\rightarrow$ Lymphadenopathy.

2nd SOI $\rightarrow$ Lungs = pneumonic plague.

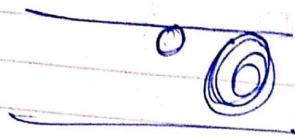
Treat $\rightarrow$ Antibiotics.
(Tetracyclin).

7. Typhoid
Enteric fever
अंत्रिय ज्वर

C.A $\rightarrow$ *Salmonella Typhi*.
MoT $\rightarrow$ Contaminated Food & water.

Foeco. oral route.

SOI $\rightarrow$ Small intestine.



=> constipation
Abdominal pain.
Fever.
(high grade fever)

98.6 — 99 — 99.4/5 — 100 — 100.4/5 39-40°C.

→ Ladder step pattern.
→ (Red spot).
Rose spot.

Test → Widal test.
(Ag - Ab)

Treat → prop → TAB vacc. (Typhoid - A - Bacilli)
Treat → Antibiotics.

T.B →

C.A → Mycobacterium Tuberculosis.

MOT → Droplet (Airborne)

SOI → L.R.T (Lungs)

Sym → productive cough.

Yellow sputum.

Bloody sputum.

Test →

X-Ray (chest)

→ sputum test.

→ Mantax test.

prop → B.C.G

Treat → DOTS. Min = 6th month...

Max = 18th month.

Leprosy

(कृष्ण रोग), कृष्ण

C.A → mycobacterium Laprae.

MOT → contagious disease.

I.P → 2-5 year Bac. (Longest)

viral I.P → 5-10 " " (ACOS)

SOI → peripheral Nervous system.

Sym → Inflammation on peri. Nerves.

+ foamy changes in skin & formation of nodules.

→ Necrosis of tissue.

Test → Lepromin Test.

Treat → MDT (Multi-drug therapy)

(Rifampasin + dapsone + Ofloxacin + Minocycline)

Cholera :- GI.

C.A → Vibrio cholerae.

MOT → Faeco-oral route.

Contaminated food & water.

SOI → Intestine.

Sym → Diarrhoea.

(Rice water stool).

B.P ↓

Treat → ORS, saline (if necessary)

virus - disease

P - polio

I - influenza.

D - Dengue.

C - common cold.

C - Chikungunia.

C - Chicken pox.

M - Mumps.

M - measles.

R - Rabies.

S - Swine.

Hep-B -

① polio : →

CA → polio virus.

pico RNA Virus.

MOT → pico-oral route.

SOI → Central Nervous System.

Symptom → fever, vomiting and
damaging of motor neuron
of spinal cord (grey matter).

prophylaxis → polio vaccine.

② Influenza : →

orthomyxo virus.

MOT → Droplet.

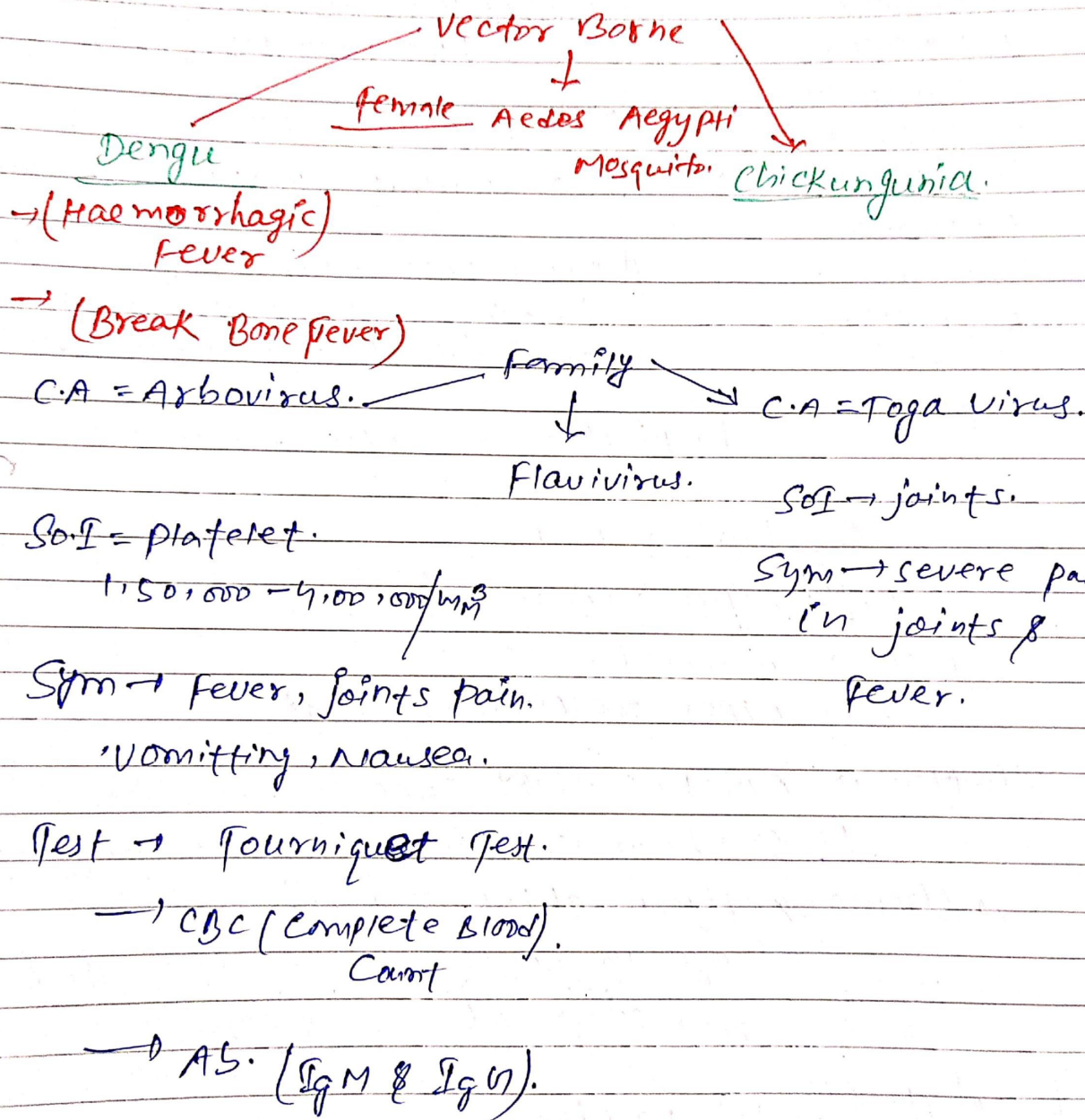
SOI → upper respiratory tract.

Symptom → Antigenic shift. Sneezing, coughing
Fever, hoarseness of voice, running nose

→ shows Antigenic shift & drift →
(change in position of Antigen and
structure of Antigen.).

prophylaxis - flu vaccine.

female mosquito & oocyte development in RBC
RBC formation की तरह होती है।



Common - Cold.

SoI → upper respiratory tract.
(Throat, nose, not lungs).

Sym → Sneezing, Coughing, Running nose.

Chicken - pox (चिकन पॉक्स)

C.A → Pox - virus.

M.O.T → Droplet infection.

Symptom → Formation of Red spots develops
in vesicle and filled with watery secretion

↓
Rupture of vesicle & formation of scab.

↓
Removal of scab causes any scar.

Mumps (मumps)

C.A → paramyxovirus

M.O.T → Droplet

SoI → parotid gland.

Non-sup purative inflammation.

↓
pus (X) नष्ट अन्त

Pand.

↓
Male

↓
Testis

(Swelling) ↓
Orchitis

↓
Female.

↓
Ovary.

↓
Ovaritis.

Prophylaxis → MMR

Measles (काँझ-हान्)

A.D.F → Droplet.

3rd day → formation of Red brown spot.
(Koplic spots) on oral mucosa.

4th day → formation of vesicle behind ear
then pass on to forehead.

5th day → Subsidence of ves.

prophylaxis → MMR.

dead person tissue aut check - autopsy.
(Neuron $\rightarrow$ Negri bodies निशानेवाला) चर्चा के मत
अनि।

Rabies (Hydrophobia)

C.A → Rhabdo virus
lyssa " "
Street " "

SOL $\rightarrow$ central nervous system.

freest

Rabipur → Human diploid cell
Culture vac.

Symptoms → 1. Laryngeal spasm.

2. Fear from water.

3. Negri bodies found in neuron of dead person (autopsy).

जहाँ पहले कुत्ता ने नहीं काला है वहाँ detergent (soap) से धोयें। (Clearly.) Then goes to hospital.

Swine flu.

C.A $\rightarrow$ H₁N₁ virus.

SARS

Severe Acute
Respiratory Syn.

C.A → corona virus.

MOT $\rightarrow$ Droplet gnf.

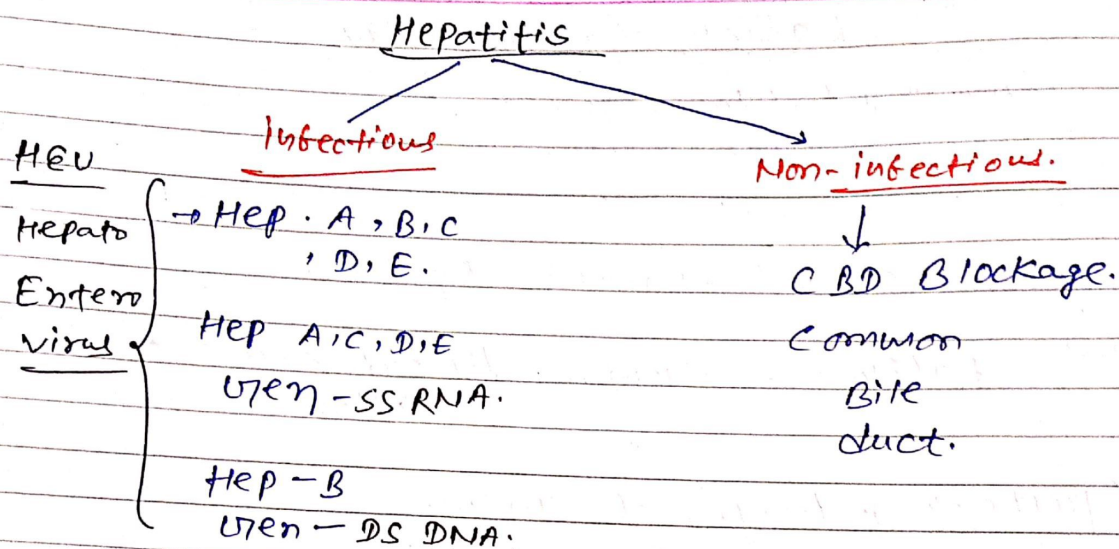
Sof $\rightarrow$ L.R.S (Lungs)

sym → pneumonia like

Treat $\rightarrow$ Temiflu

Aims

(Free supply by gov)



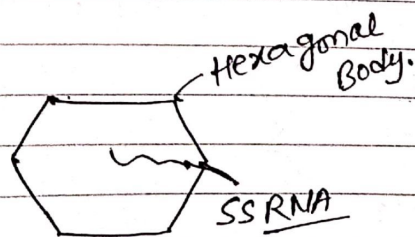
Hep-A

- Epidemic Hep.

MOT → Cont. Food & Water.

Gene - SS RNA.

I.P → 2-6 week.



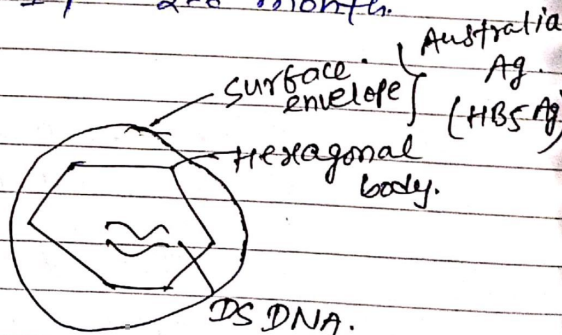
Hep-B

- Serum Hep.

MOT → Blood Transfusion & STD

Gen - DS DNA.

I.P - 2-6 months.



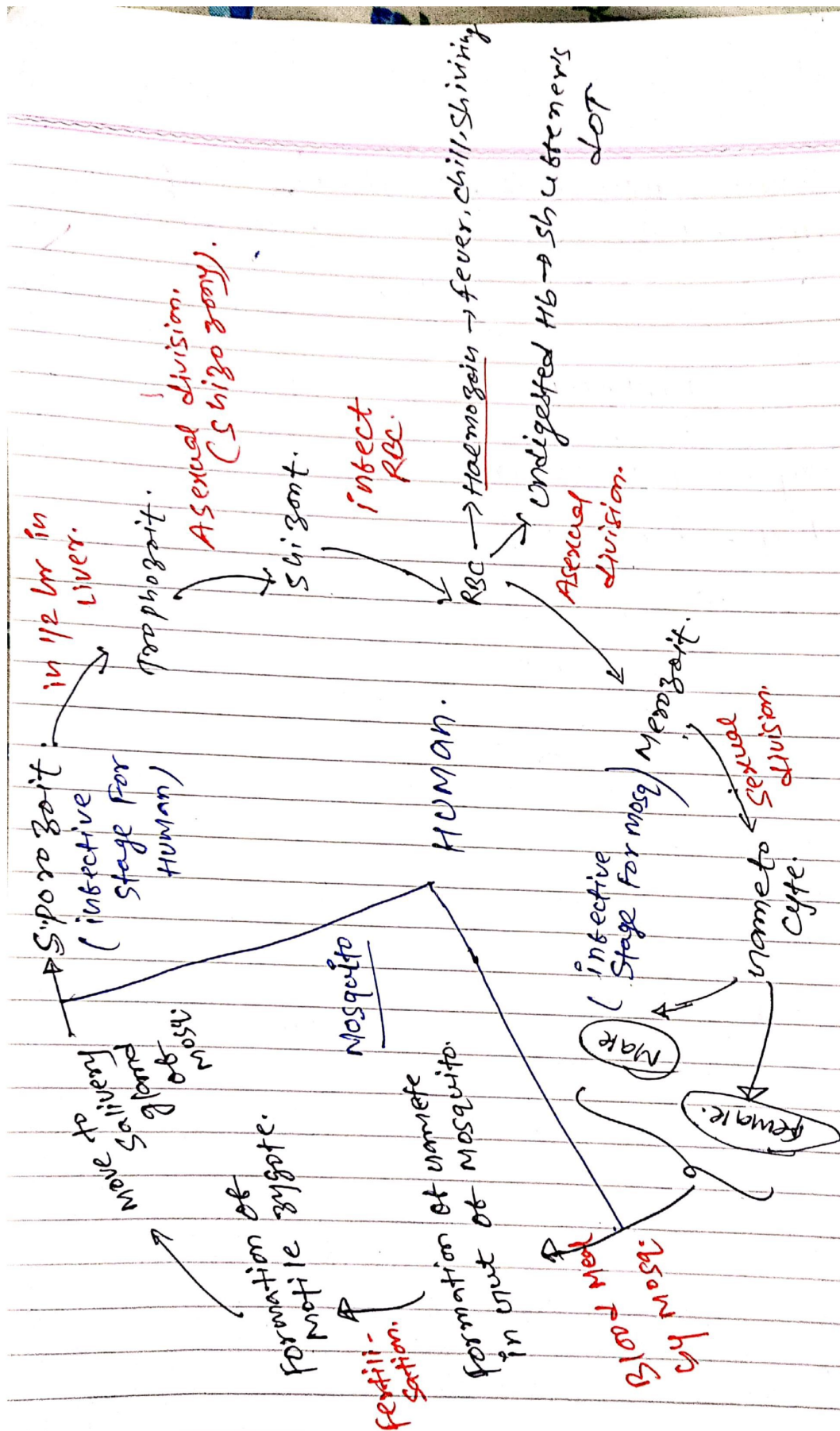
1. SH disease it rest virus like & /
 2. SH carbohydrate coat not like /
- ex:- sponge (2H3mm) not dissolving
: not proteinous and fatty oily food.

Treat. Serum Bilirubin & enzyme SPT.
Serum glutamic pyruvic transaminase.
(5-40 IU)

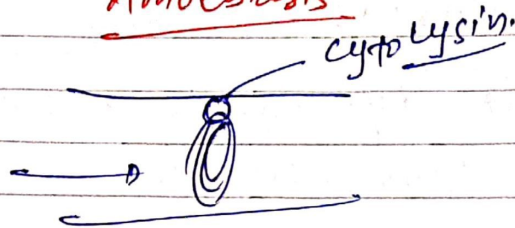
MALARIA

(sexual) Primary host = human.

(asexual) Sec. host → mosquito.



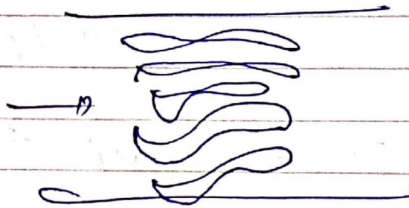
Amoebiasis



Treat → Metronidazole.
Metrogyl - 400.

Ascariasis

A. Lumbricoides.



Treat → chenopodium.
Albendazole.

Filaria

affect lymphatic vessels of
the lower limbs.

Gonorrhoea :-

Symptom → vaginal discharge.
+
Yellow creamy pus.

+
Painful Urination & Burning
Sensation. (Burning micturition)

Treat → Ciprofloxacin

* Genital herpes :-

Symptom :- vaginal discharge.

+
Burning mic.

+
Fever + Chills.

Latent → H.S. sacral plexus.

Treat → Antiviral.

अगर ज्यादा दिन तक होतें then causes
SKIN Carcinoma (Cancer)

* Genital wart : → H.P.V
(Human papilloma virus)

Sym → Genital perineum
Cauliflower like warts (गुच्छ).

→ May causes cervical carcinoma.

* Syphilis : → French Pox.

Primary Stage.

Destructive sore.
(गुहा)

Hard ridge.

↓
Hard chancre.
(गुहा)

Sec. Stage.

Leison.



GRAMMA

* Trichomoniasis (in female).

Sym : → vag. Discharge.

+ yellow creamy pus.

+ foul smell + Itching.

अगर eye में गत हो by towels or
other में than causes → Trachoma.

prostitute
* AIDS 1st time
occur in monkey
than in America it seen
in 2 homo-sexual male.

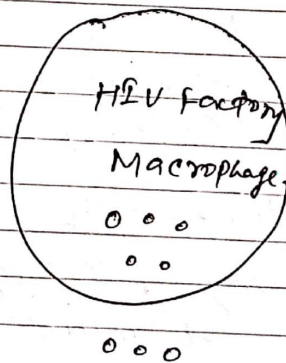
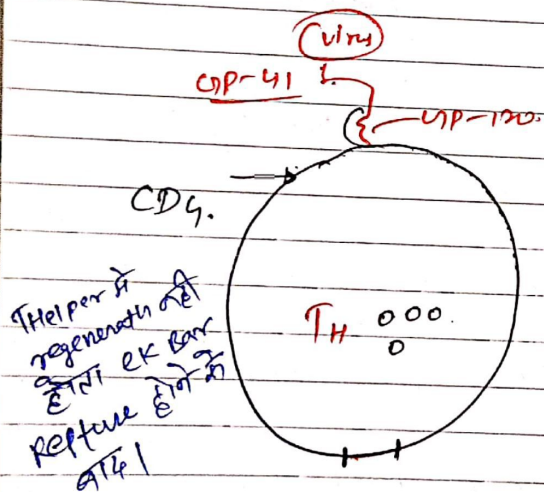
AIDS

MOI :-

1. Sexual route.
2. Parental "
3. Transplacental route.

⇒ Transplantation = Mother to Foetus.
= Placenta = 35%

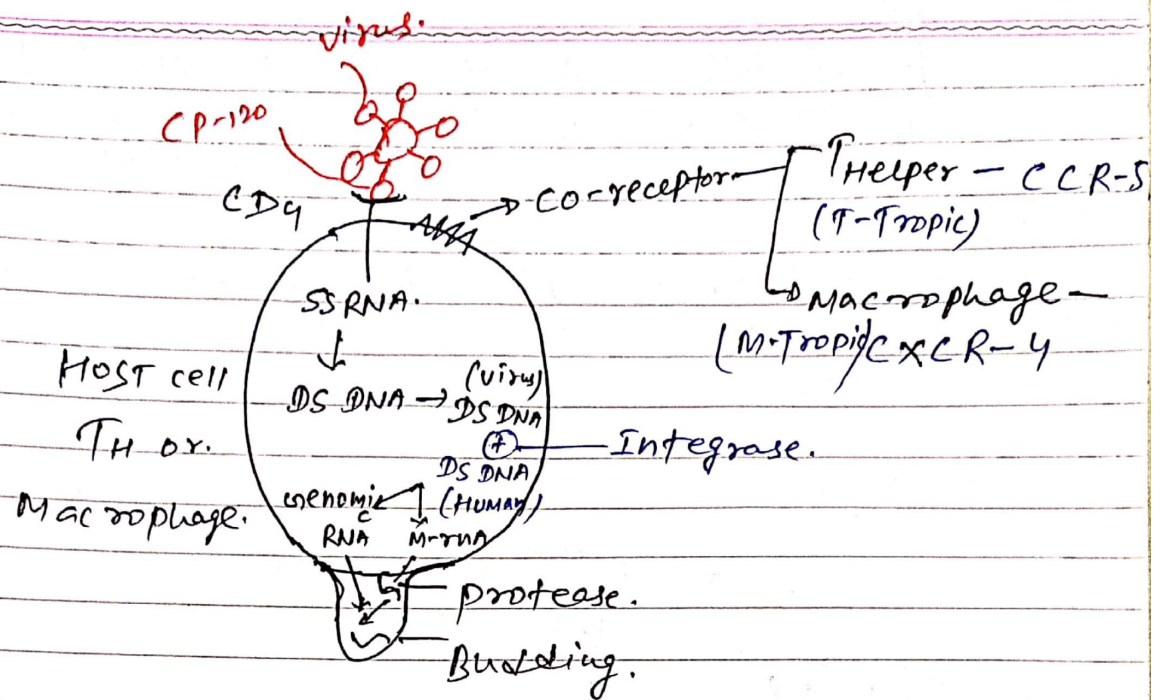
⇒ Postnatal = Mother to Neonate
= Milk = 20%



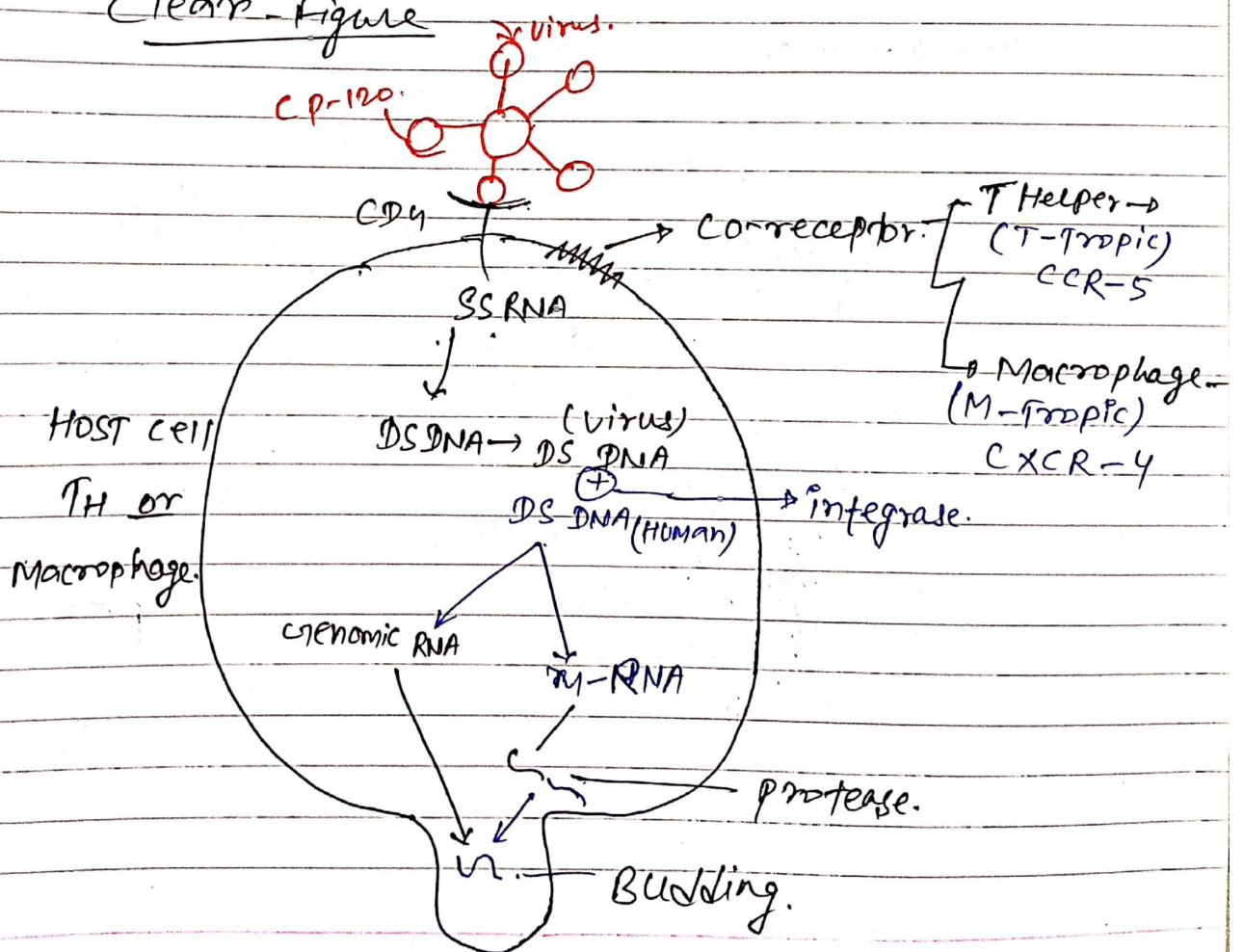
Regeneration
Capacity.

It has single stranded RNA = 2 Strand. ~~not double~~

1. R.T ⇒ 2
2. Integrase.
3. Protease.

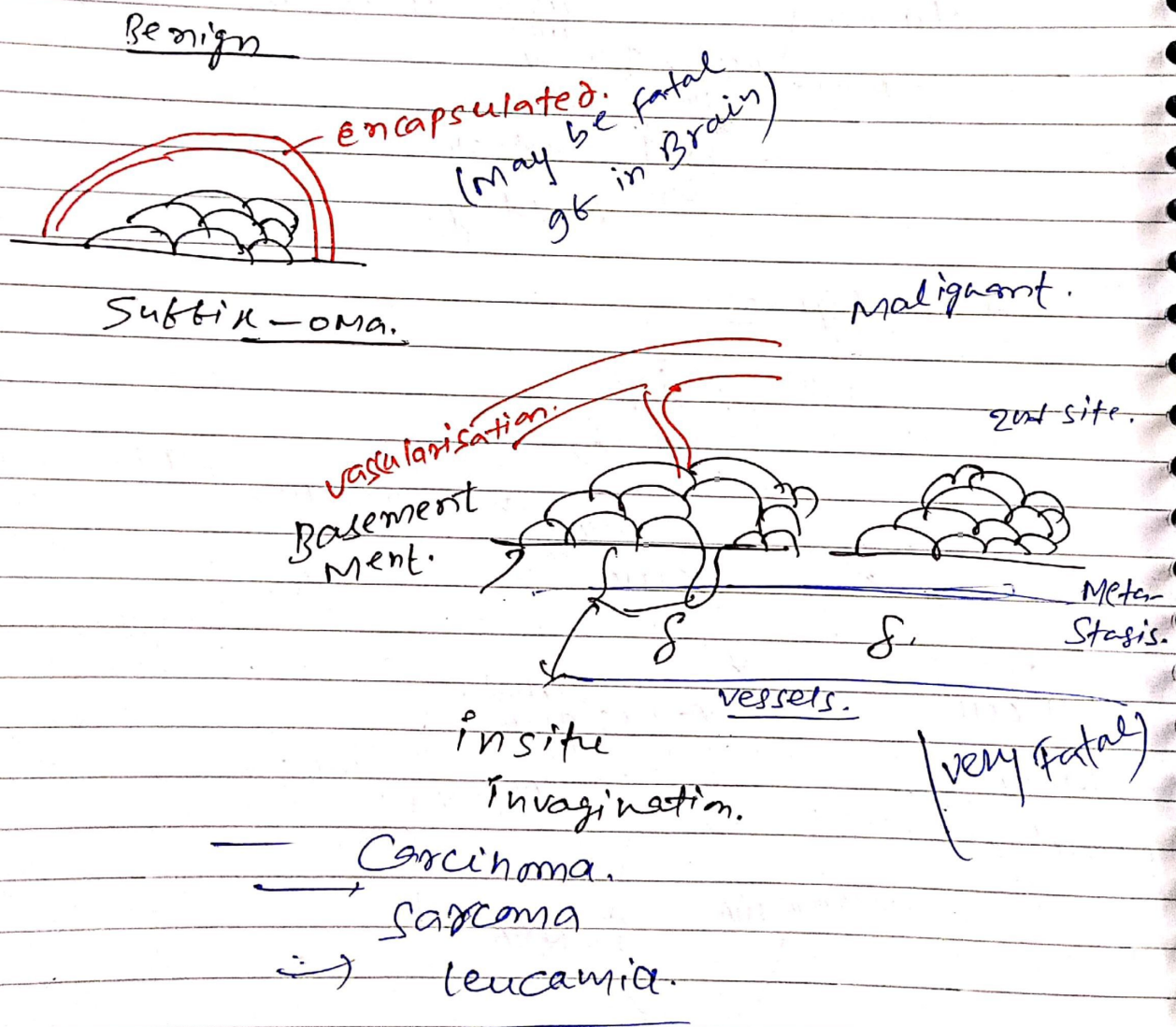


Clear Figure



$$\frac{T_H}{T_K} = \frac{CD_4}{CD_8} = \frac{2}{1} = \frac{1}{1} = \frac{900 \times 10^6 / \text{Lit.}}{200 \times 10^6 / \text{Lit.}}$$

* Main cause of death in AIDS
= T.B



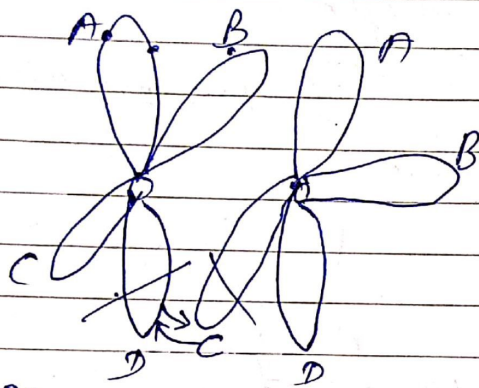
Lymphoid

— Lymphocyte.

Ex: - Burkitt's Lymphoma.

Reciprocal translocation

b/w non-homologous
posith on 14th & 8th.



it is homologous

Myeloid

— Apart From Lymphocyte

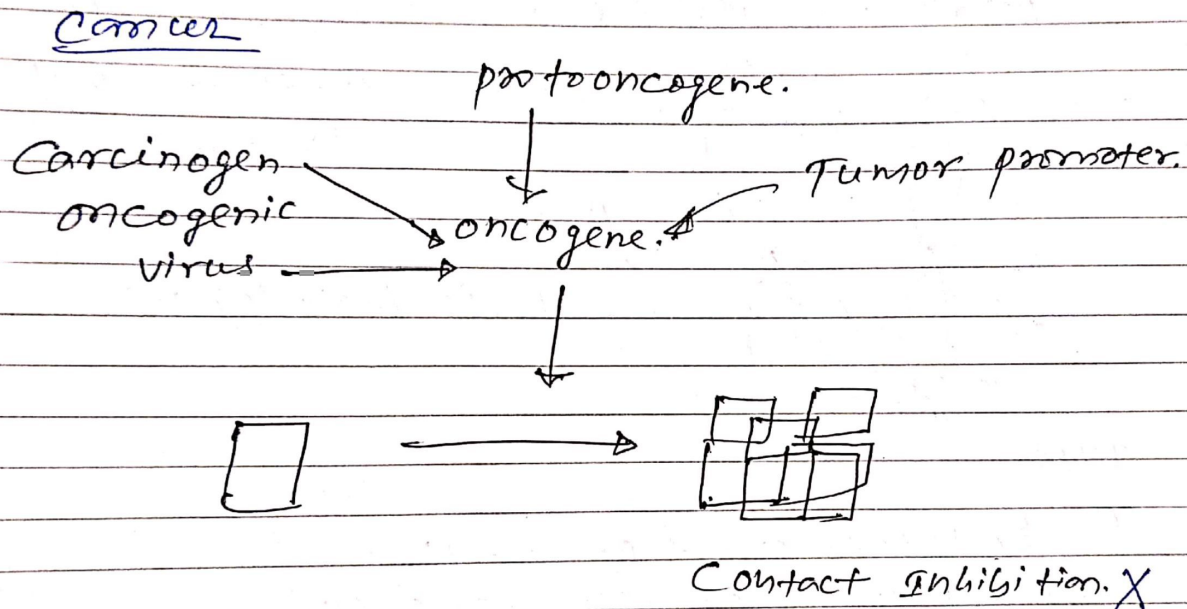
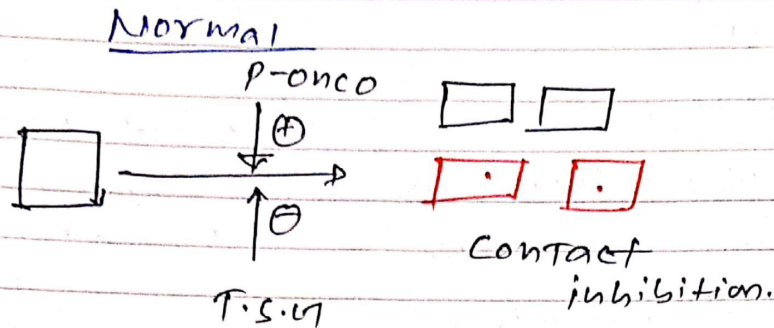
Ex: - CML - chronic
myelogenous leukemia

— R.T b/w
non-homologous

posith on 22th &
9th ch.

Type

- ① proto oncogene (p-onco)
- ② cellular oncogene (c-onco)
- ③ Tumor suppressor gene (T.S.G)
- ④ Gene Related programmed / cell death
(Apoptosis) / suicide gene



Causes :-

1. Chemical

- A. N-Nitrosodium Ethelene.
- B. Art. sweetner. (Slice, maja) gola.
- C. DES.
- D. Dye.

2. Physical

- A. Radiath (x rays, y-rays)
- B. Sharp teeth.
- C. Kargri cancer.

oncogenic virus

- DNA →
1. Herpes simplex virus = Skin carcinoma.
 2. Human papilloma " = Cervical "
 3. Hepatitis B " = Liver "
 4. Epstein Barr " = Lympho Sarcoma.

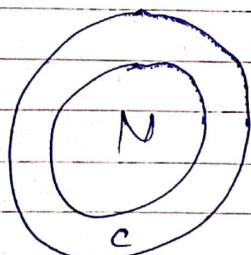
RNA → HIV — Kaposi Sarcoma.

Treat:-

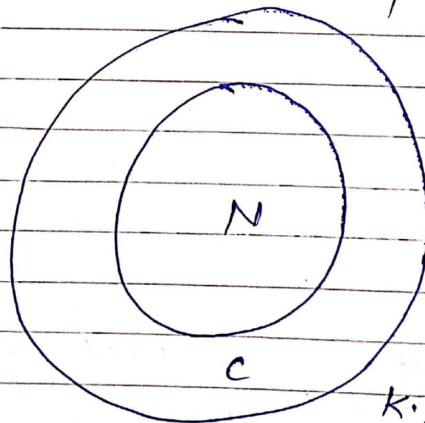
* 1st line of Investigatⁿ → IL and Interppn.
2nd " " " → Organ specific.

3rd - Blood Sample = Tumor Marker.

Biopsy = KI = $\frac{\text{Vol. of nucleus}}{\text{Vol. of (cytoplasm - Nucleus)}}$



$K.I < 1$



$K.I > 1$

Drugs

↓ (i) Depressant

↓ (Psychotropic)

↓ Tranquilliser

→ Barbiturate.

→ Benzodiazepine.
→ Zopine.

↓ Sedatives & Hypnotics

→ Benzodiazepine.
→ Alprazolam.
→ Valium.

↓ Opiate (Narcotic) Derivative

→ Morphine (Pain killer)
by Acetylation
→ white coloured
crystalline products.

(formaldehyde - No formation of salts in free form.)

→ Heroin (smack)
Receptor - CNS & Int

Barium
Sesam - Heroin +
Chalk powder
+ ZnO
+ strachnine

↑ Over-mental activity

Normal.

Slow.

Sleep.

↓ Stimulant

Caffeine. Cocaine. Amphetamine

1 cup Tea - 50mg

1 cup Coffee - 100mg.

→ Coke
→ Crack.
→ Ecstasy
→ Xylun
→ Coca.
→ Native of South America.

→ Intertense secretion of Dopamine.
→ Cause - Euphoria.
Excess - Hallucination.

(Psychodetic).
(vision producing drug)

LSD

Lysergic acid
Dietary Amide. & Ketone.

→ By Fungi
Claviceps purpurea.

Aproa.

Retinodoma

Ex: →

→ Receptor
→ Cardiovascular system
Ex: → along
Sum → along
resin → Chana's
latter → Haggis's
Marijuana.

Hallucinogen.

using

do test
for Atropine
before penum

- * 1st effected part of brain - Cerebrum.
- * most affected - cerebellum.

<u>Bronchitis</u>	<u>Asthma</u>	<u>Emphysema</u>	<u>pneumonia</u>
<u>Site</u> → Bronchi	Bronchi	Alveoli	Alveoli
<u>Symp</u> - Cough (Dry cough)	Difficulty in breathing	→ Destruction of Alveolar wall & Symptom	→ No Gases Exchange.
→ NO obstruction of Air way	Always are pneumonia airway like.	Obstruction due to mucous deposit.	
→ 100% alcohol absorbed by stomach and go into blood.			

Alcohol

↓ Alcohol dehydrogenase.

Acetaldehyde.
(Toxic) → (Hangover)

↓ Acet. Dehydrogenase.

oxygen.
(Heat)

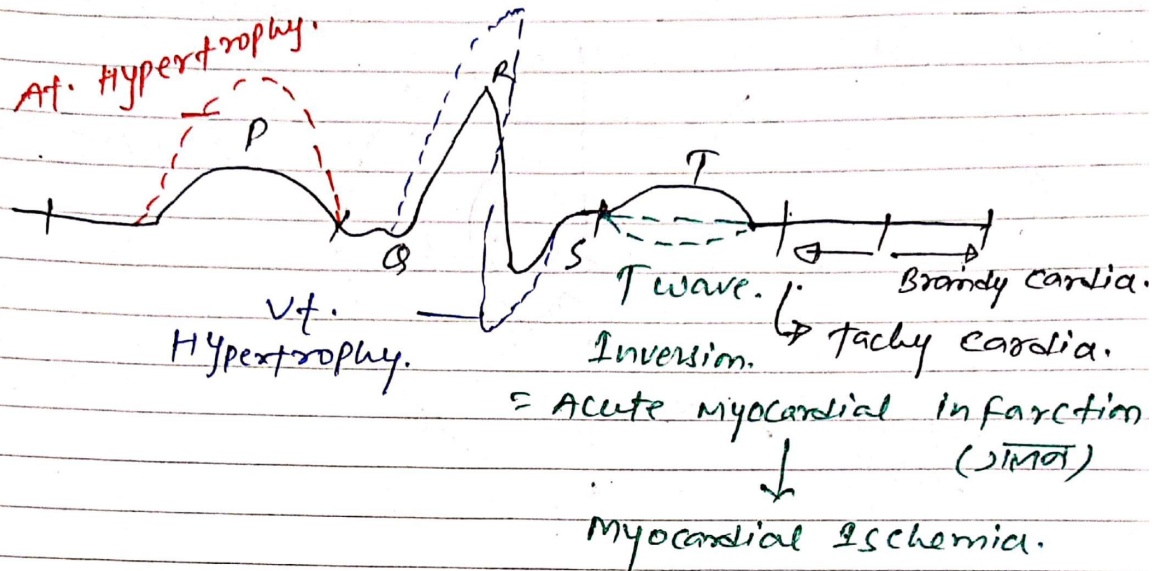
Promotor.
fat deposits in liver.

→ Fatty liver.

↓ Liver Fibrosis.

Liver Cirrhosis.

E.C.G



P-wave = At. Depolarisation = Systole.
QRS - " = Vt. " = Systole.
T - " = Vt. Repolarisation = Diastole.

At. Systole = .1 sec.

At. Diastole = .7 "

Vt. Systole = .3 "

Vt. Diastole = .5 "

