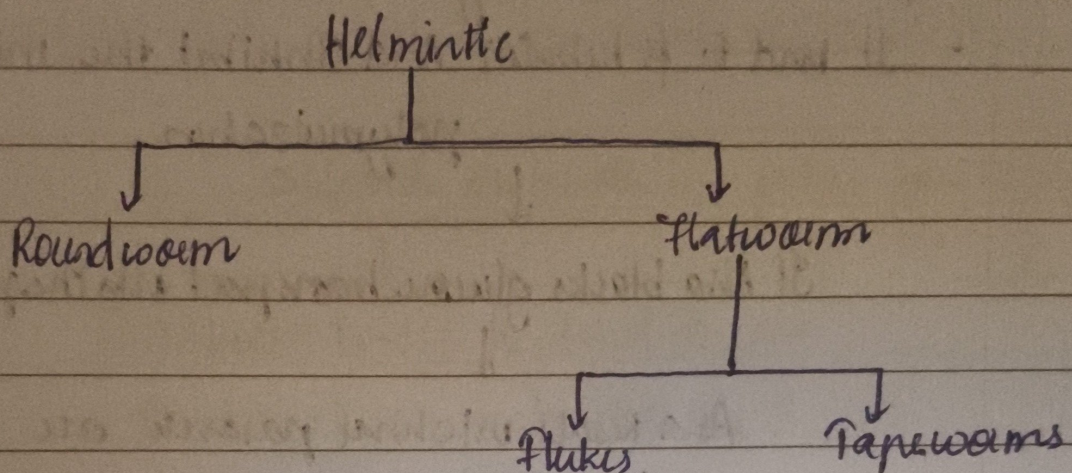


Regimen

IDA triple drug Regimen $\rightarrow$ Ivermectin 0.2 mg/kg + DEC 6 mg/kg
ALB 400 mg

ANTI-HELMINTIC DRUG:

These are used in the t/b of infestation with helminths in the intestine tract or tissue of the body.



CLASSIFICATION:

- 1) For Roundworm, Hookworm, Pinworm
: Albendazole, Mebendazole, Ivermectin, Pyrantel pamoate
- 2) For whipworm, *Trichinella spiralis*:
: Albendazole, Mebendazole
- 3) For tapeworm:
: Albendazole, Niclosamide
- 4) For Hydatid disease
: Mebendazole, Albendazole
- 5) For Filariasis:
Ivermectin, Diethylcarbamazine

⑥ For Thread worm
Ivomectin, Albendazole

MEBENDAZOLE: It is a benzimidazole has a broad spectrum of Anthelmintic Activity.

— It bind to β tubulin and Inhibit the microtubule polymerization.



It also blocks glucose transport into the parasite.



As a Result intestinal parasite are immobilized or die slowly.

PK → orally, HB is liver, excreted in faeces & urine

ADR → GIT - NVD

Rashus, itching, drug fever etc.

Uses: t/t of Round, Hook, whip worm

Dosage - 100mg 2 a day for 3 days.

MCA — more effective than Albendazole in trichuriasis

ALBENDAZOLE:

broad spectrum Anthelmintic Activity.

MOA same as MEBENDAZOLE.

⇒ One dose t/t has produced cure Rate in Ascariis,

MCA — hookworm, enterobiasis.

⇒ In strongyloidosis it is more effective than mebendazole

- It has weak microfilaricidal action, kills cysticerci, hydatid larvae, cutaneous larva migrans.

Pk → oral

Ab↑ when taken with fatty meal

in FBM it is converted into Active Metabolite



sulfoxide metabolite → potent Anthelmintic
Activity



Distributed to Ht hydatid disease

so prefer over mebendazole

ADR → NVD, Alopecia, neutropenia, headache

Uses:

1) Nematodes: It highly effective against intestinal nematodes - Round, Hook, pin.

parasite
Alk CUS

2) Neurocysticercosis: All of praziquantel are highly effective.

→ cheap

→ Duration of Ht is shorter

→ Reaches high conc in brain of CSF

→ less toxic & better tolerated

High dose of glucocorticoids are usually given Along
+ ↓ the inflammatory Rn.

- 3) Hydatid disease →
 - 4) Filariasis → + DEC Also given.
 - 5) Latent larva migrans.
- CT is pregnancy.

Diethyl carbamazine citrate (DEC) → slow Acting
 ↳ It is Microfilaricidal (MF)

- most effective drug used in the t/t of filariasis
 And tropical eosinophilia caused by W. bancrofti / B. malayi.

⇒ They Attack the organelle membrane of the MF
 ↳ (destroy host defense mechanism)
 cell death.

⇒ mainly Attack MF but Adult Also killed on long term.

PK - Absorbed from GI tract
 HB is liver & urine
 safe in pregnancy.

ADR → leukopenia And Mild Allergic

⇒ Drug Induced effects → ANVD

⇒ Parasite Induced Rⁿ → due to the Release of protein from parasite.

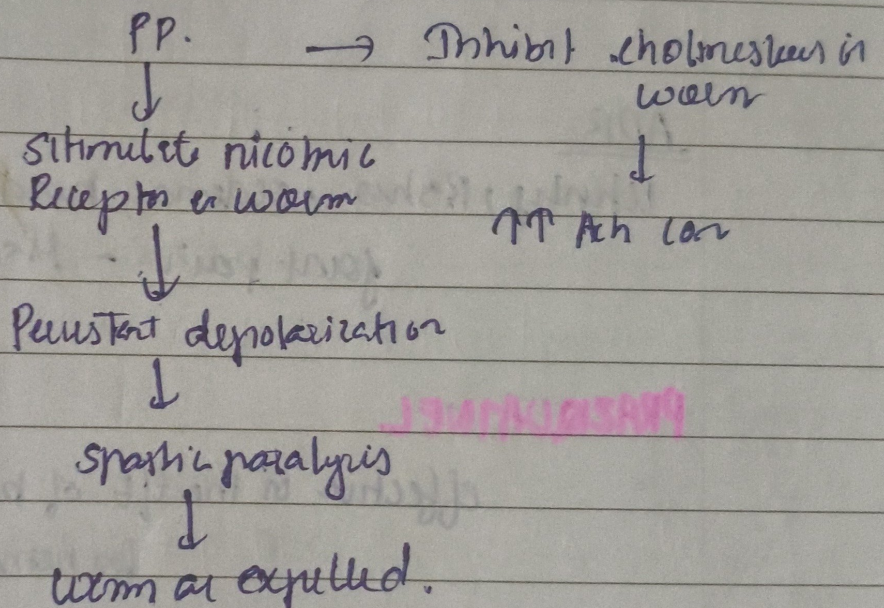
In ophiocercariae DEC produce a severe Rⁿ

↳ Skin Rash, pain, fever, joint pain, urticaria, eosinophilia
 ↳ (Hazzotti Rⁿ)
 lymphadenitis.
 ↳ +/t → H₁ Blocker / antihistamine

Uses:

- ⇒ Tilacis: DDC for this
Daily 6mg/kg.
PEC + Albendazole → Reduce transmission.
- ⇒ Topical encephala: tds for 3 weeks.

Pyrantel Pamoate:



IVERMECTIN:

MOA:

- ↓
- Activate Glutamate-gated chloride channel
 - ↑ GABA transmission in worm

↓

Hyperspolarization and paralysis of worm

↓

Death / phagocytosis of worm.

→ It has been used as an Add-on drug to Albendazole
PK → orally Rapidly Absorbed, HBV not excreted in faeces.

Uses: POC for onchocerciasis

Relieve pruritus And skin disease.

→ very effective in strongyloidiasis, Ascariasis, Cerebral
migraines

- useful for mass chemotherapy of filarial

as single annual dose Abrogates

Albendazole

ADRs

Urticaria, Rash, oedema, headache, fever, muscle &
joint pain. - Mazzoli Rx during t/t of
filariasis

PRAZQUANTEL

effective in the t/t of trematodes & cestodes but not
for nematodes.

Mechanism:

They

→ ↑ Ca^{2+} influx into the
↓ tegument.

↑ muscular contraction.

& spastic paralysis.

At higher conc → death of parasite.

PK → orally Absorbed

ADR → NVD, joint pain, itching,

Uses → POC for schistosomiasis

Tapeworm moribundation, Neurocysticercosis