

Canine

Parasitic Dermatitis

① Ticks

② Mites

Demodicosis - *Demodex* spp.

Scabies/Mange - *Sarcoptes* spp.

Juvenile
(3-18m)

Adult
(>18m)

③ Fleas

④ Lice

Symptoms - Ticks

- * Ticks usually don't produce gross lesion
- * Inflamed nodules are found at the attachment site.
- * Most common site - Ear, Interdigital space

Symptoms - Demodicosis

- Patchy alopecia - Regional/Multifocal/Diffuse
- Variable erythema, silvery greyish scaling (comedones), papules and pruritus
- Long standing cases - lichenification, hyperpigmentation, pustules, erosion, ulceration & crust formation.
- Lymphadenomegaly
- Systemic signs [fever, depression, anorexia] - 2° infection

Symptoms - Scabies

- Papules, alopecia, erythema, crusts
- Initially starts at less hairy parts - Hock, Elbow, pinna margin, ventral abdomen and chest. Then it spreads over body. Usually dorsum of the back is spared.
- Intense pruritus.

Diagnosis - Tick/Flea/Lice

- ① Naked eye visualisation
- ② Under a microscope
- ③ Flea Dirt - Flea fecal matter
- ④ White Nits - Lice

Diagnosis - Mite

- ① Skin scrapping examination
- ② Scratch Test/ Penal Pedal Reflex Test - Scabies (80% accuracy)
- ③ Differential Diagnosis
 - Hypersensitivity - intradermal allergy test. Last disease to diagnose
 - Endocrinopathy
 - Pyoderma - Papular dermatitis, epidermal collarette
 - Malassezia Dermatitis - Lichenification, hyperpigment
Elephant skin lesion, Brown discoloration of nail base

Treatment - Tick/Flea/Lice

- ① Manual removal - Tweezer/Combing & Premise cleaning
- ② Topical Preparations
 - a) Amitraz - Solution
 - b) Fipronil - Spot on & Spray
 - c) Permethrin - Shampoo
 - d) Methoprine - Spot on
 - e) Piriproxyfen - Spot on
 - f) Selamectin - Spot on
 - g) Metaflumizone - Spot on
 - h) Carbararyl - Powder
 - i) Propoxur - Powder

③ Isoxazolines (Chloride channel blocker)

- a) Afoxolaner [NEXGUARD] PO
 - b) Fluralaner [BRAVECTO] PO
 - c) Lotilaner [CREDELIO] PO
 - d) Sarolaner [SIMPARICA] PO
- } 4 weeks interval

Treatment - Demodicosis

Principle of Treatment - The protocol should be continued for at least 1 month beyond the time when two consecutive scrappings are negative.

Clinical Improvement - 1-1.5 months

1st Negative - 1.5-2 months

Most patients need approximately 3 months treatment.

① Treat the underlying cause (steroid containing therapies should be discontinued)

② Intact dogs, especially females, should be neutered.

③ Secondary infection if any should be treated first.

④ Topical preparations

Shampoo containing 1-3% Benzyl peroxide every 3-7 days

For small breed dogs - 9% Amitraz collars can be effective as ivermectin.

Promeris [Metflumizone + Amitraz] spot on - Every 2 wks

⑤ IVERMECTIN @0.2-0.6mg/Kg PO q24hr

Suppose you want to give @0.4mg/Kg

day 1 @ 0.1

day 2 @ 0.2

day 3 @ 0.3

day 4 @ 0.4 → then continue

cure rate = 85-90%.

Toxicity signs of Ivermectin - Depression, Disorientation & incoordination.

MILBEMYCIN OXIME @ 0.5mg/Kg PO q24hr
cure rate 85-90%.

DORAMECTIN @ 0.2-0.6mg/Kg SC weekly once
cure rate 85%.

Treatment - Scabies

① Secondary infection should be treated.

② Topical Therapy

- Shampoo every 3-7 days

- 0.025% to 0.03% Amitraz solution } every 2 weeks
- Fipronil spray } for 4-6 weeks
- 2-3% lime sulfur solution }

③ Systemic Drugs

a) SELAMECTIN @ 6-12mg/Kg every 2 weeks - 8 weeks

b) IVERMECTIN @ 0.2-0.4mg/Kg PO q7days } 4-6 weeks
SC q14days } (minimum)

c) DORAMECTIN @ 0.2-0.6mg/Kg SC q7days 4-6 weeks

d) MILBEMYCIN OXIME @ 0.75mg/Kg PO q24hr 30 days
@ 2mg/Kg PO q7days 3-5 weeks

e) Topical MOXIDECTIN every 2-4 week - 2-3 application

④ Premise cleaning

Research Articles

2016

FRANCE

Oral Afoxolaner Vs Imidacloprid/
[NEXGUARD] Moxidectin spot on
[ADVOCATE]

Result - Afoxolaner was better in
managing demodicosis

2022

INDIA

Therapeutic management of Demodicosis

Group I - Control

Group II - Amitraz + Ivermectin

Group III - Safrone oil + Tablet

Group IV - Fluralaner

Result Group II > Group IV > Group III

2022

CANADA

Efficacy of Isoxazolines in managing
canine demodicosis, sarcoptic mange &
lice infestation

Canine Demodicosis

Fluralaner - 1 oral / Topical

Afoxolaner - 3 monthly oral dose

Lotilaner - 3 monthly oral dose

Sarrolaner - 3 monthly oral dose

Canine Scabies

Fluralaner - 1 oral / Topical

Afoxolaner - 1 oral dose

Lotilaner - 2 monthly oral dose

Sarrolaner - 2 monthly oral dose

Lice Infestation

Fluralaner - 1 oral / topical

Sarrolaner - 1 oral dose