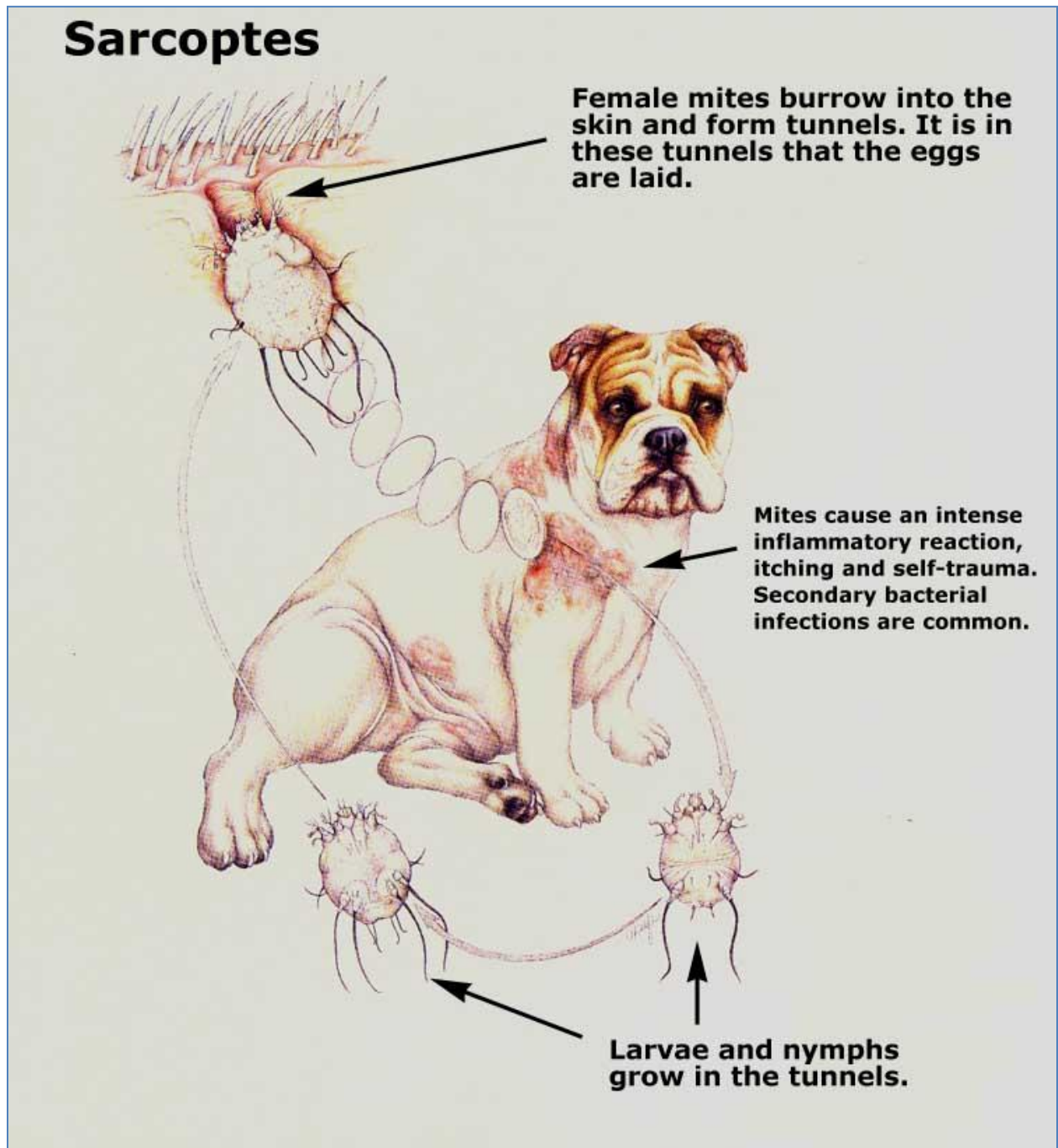


COMMON MANGE IN DOGS AND CATS

Sarcoptic Mange

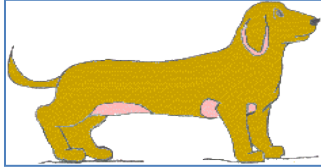
LIFE CYCLE OF *Sarcoptes scabiei*

- 17 – 21 days spent on the dog
- Females burrow tunnels in the stratum corneum to lay eggs



CLINICAL SIGNS

- Intense pruritus
- Papular eruption → self trauma → thick crusts
- Alopecia: ears, elbows, hock, abdomen



- Secondary bacterial and yeast infections
- Chronic: seborrhoea, severe thickening of the skin with fold formation and crust build up, peripheral lymphadenopathy and emaciation.

DIAGNOSIS

- Based on history of severe pruritus of sudden onset
- Possible exposure and involvement of other animals, including humans
- Skin scrapings which are negative 20% of cases
- Concentration and flotation of several scrapings may increase chances of finding the mites, eggs or faeces.
- Specific and sensitive commercially available ELISA for detection of specific antibodies
- Trial therapy

TREATMENT

Topical Treatment

- Hair can be clipped, the crusts and dirt removed by soaking with a good antiseborrhoeic shampoo and an acaricidal dip applied.
- Lime-sulphur – safe for young animals; several dips 7 days apart
- Amitraz – applied as a 0.025% solution at 1-2 week intervals for 2-6 weeks
- Fipronil spray – should be considered as an aid to control rather than primary therapy
- Fipronil and Flumethrin/imidacloprid collars

Systemic Treatment

- Selamectin – spot on formulation at 6mg/kg once or twice at a 1 month interval
- Moxidectin (not in USA) – spot on formulation 2 doses of 2.5mg/kg, weeks apart
- Milbemycin oxime is 2 mg/kg, PO, twice a week for 3–4 wk
- Ivermectin (200 µg/kg, PO or SC, 2 treatments 2 wk apart) is very effective and usually curative. Ivermectin at this dosage is contraindicated in Collies and Collie crosses.

ZOONOSIS:

- Contagious 24 hours up to 21 days



Notoedric Mange (Feline Scabies)

- Rare, highly contagious disease of cats and kittens caused by *Notoedres cati*
- Life cycle similar to sarcoptic mite
- Severe pruritus, crusts and alopecia (ears, head and neck)
- Mites found easily on skin scrapings
- Treatment – lime-sulphur dips at 7 day intervals; extra-label use of amitraz not recommended; nonapproved but efficient treatments include selamectin (6 mg/kg, spot-on), moxidectin (2.5 mg/kg, spot-on), and ivermectin (200 µg/kg, SC). Sudden death in kittens has been reported with the use of ivermectin.



Demodectic Mange 'Red Mange'

LIFE CYCLE OF *Demodex canis*

- Part of normal flora
- Transmitted from dam to puppies during nursing within the 1st 72 hr after birth
- Mites spend entire life cycle on the host
- Disease is not contagious



CLINICAL SIGNS

Localized Demodicosis

- < 2 years old
- Lesions seen on head, neck and feet
- Resolve spontaneously
- Lesions: areas of focal alopecia, erythema and hyperpigmentation and comedones
- Weak or absent pruritus
- Can progress to generalized form



Generalized Demodicosis

- Severe disease with generalized lesions that are usually aggravated by secondary bacterial infections (pyodermatitis).
- Accompanying pododermatitis is common.
- Dogs can have systemic illness with generalized lymphadenopathy, lethargy, and fever when deep pyoderma, furunculosis, or cellulitis is seen.



DIAGNOSIS:

- Deep skin scrapings
- Hair plucking
- Both reveal mites, eggs and larval forms in high numbers
- Whenever generalized demodicosis is diagnosed in an adult dog, medical evaluation to identify an underlying systemic disease should be pursued.

TREATMENT

- Hair clipping and body cleansing, especially with benzoyl peroxide shampoo used for its follicular flushing activity, may be required.
- Whole-body amitraz dips (0.025%) applied every 2 wk remains the only approved treatment for generalized demodicosis in the USA.
- Higher concentrations (0.05%) and shorter treatment intervals (1 wk) may be more efficient.

Feline Demodicosis

- *Demodex cati* normal inhabitant of feline skin
- Similar to canine mite but narrower
- Localized or generalized demodicosis
- *Demodex gatoï* is a shorter mite and found only in the stratum corneum
- Diagnosis: superficial (*D gatoï*) and deep (*D cati*) skin scrapings, although mite numbers are often small, especially with *D gatoï*. Medical evaluation is indicated in cats with generalized disease. Dermatophyte cultures are essential, because dermatophytosis and demodicosis can be concomitant conditions.
- Treatment: Weekly lime-sulphur dips (2%) are safe and usually effective; amitraz (0.0125–0.025%) has been used, but is not approved for use in cats and can cause anorexia, depression, and diarrhoea. The use of antiparasitic macrocyclic lactones has been reported but their efficacy is unclear.



SOME DRUGS USED IN THE TREATMENT OF MANGE *

Generic Substance (Trade Name)	Method of Application	Comments <i>Always check manufacturers datasheets.</i>
Amitraz 0.1% (Tactic) (Topline)	Spray Pour on	Spray 3 times 10 days apart.
Benzyl benzoate	Liquid	Topical application to chronic lesions
Diazinon 0.05%	Spray	Spray 3 times 10 days apart
Doramectin (Dectomax)	Injection (49 days withdrawal)	Repeat in 14 days
Ivermectin (Ivomec)	Feed (7 days withdrawal) Injection (28 days withdrawal) Injection + premix	Feed for 7 days (manufacturers recommendation/licence) Repeat in 14 days for eradication (only) Pre-farrowing or 6 monthly for routine control
Lindane 0.06%	Spray (60 days withdrawal)	Repeat in 10-14 days
Melathion 0.5%	Spray	Repeat in 10-14 days
Phosmet 20% (Porect)	Pour on	1ml/10kg repeat in 14 days
Toxaphene 0.5%	Spray	Repeat in 10 - 14 days