

# Lice (Pediculosis) Infestation

## AETIOLOGY AND PATHOGENESIS

Lice infestation is more common in Europe than North America. Infestations are predominantly seen in animals housed together, especially if they are young or debilitated. The most common species that infest dogs is the biting louse (Mallophaga) *Trichodectes canis*. Other species seen in warmer climates are the sucking lice (Anplura) *Linognathus setosus* and *Heterodoxus spiniger*. The only species that infests cats is the biting louse *Felicola subrostratus*.

The entire life cycle is completed on the host within three weeks. Eggs are laid on hairs and hatch into nymphs, which undergo several moults to become adults. Transmission occurs by direct contact or by grooming with contaminated brushes or combs. Lice are host specific but transient contamination of other in-contact hosts, including humans, may be seen.

## CLINICAL FEATURES

The clinical appearance is quite variable and can include: asymptomatic carriers; variable dandruff with mild itching; rough, dry hair coat; hair loss, bumps in the skin, and crusts with mild to moderate itching. In some cases there will be severe redness of the skin, hair loss, abrasions of the skin, and crusting with extensive itching. Heavy infestations with sucking lice may result in anaemia, especially in young animals.

## DIFFERENTIAL DIAGNOSES

- Walking Dandruff (Cheyletiellosis)
- Ringworm (cats)
- Sarcoptic mange
- Allergic (Atopic) dermatitis
- Adverse food reactions
- Chiggers infestation
- Flea bite hypersensitivity (flea allergic dermatitis)

## DIAGNOSTIC TESTS

Diagnosis is based on finding the lice or the nits on the skin or hair. Lice are wingless, dorsoventrally flattened insects with strong, gripping claws. Biting lice have broad heads whereas sucking lice have narrow heads. Their eggs are cemented to the hair shaft.

## MANAGEMENT

Two treatments 14 days apart using pyrethrin sprays, shampoos, or dips are effective in most cases. Single or multiple treatments with fipronil, selamectin and imidacloprid are also effective. Two ivermectin injections two weeks apart have been reported to be effective, but is contraindicated in Collies, Collie crosses and other herding breeds.

## KEY POINT

Lice are usually easily detected, but may be missed if not suspected, especially