

# How I approach . . . pyotraumatic dermatitis ('hot spots')

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## KEY POINTS

- Lesions develop within a few hours and are characterised by severe pruritis, erythema and focal alopecia.
- Pyotraumatic dermatitis responds readily to a number of treatment protocols such as clipping, cleaning, topical glucocorticoids, antibiotics and/or antiseptics and, in more severe cases, short courses of systemic glucocorticoids and/or antibacterial agents.
- The challenge for the clinician is not so much a case of treating the current lesion but of preventing recurrence, as pyotraumatic dermatitis is a symptom rather than a disease.

Canine pyotraumatic dermatitis ('hot spot' or 'wet eczema') has very distinct features (Figure 1). It is typically of acute or peracute onset. Lesions develop within a few hours and are characterised by severe pruritis, erythema and focal alopecia. The surface is moist and often covered by matted hair and accumulated exudation. The skin surface is eroded.

Pyotraumatic dermatitis responds readily to a number of treatment protocols such as clipping, cleaning, topical glucocorticoids, antibiotics and/or antiseptics and, in more severe cases, short courses of systemic glucocorticoids and/or antibacterial agents (1, 2). Lesions are normally very superficial, but, in certain breeds, such as the Golden retriever or Saint Bernard, they are deep. Such cases require systemic antibiotic therapy, sometimes for several weeks (3).

The challenge for the clinician is not so much a case of treating the current lesion but of preventing recurrence, as pyotraumatic dermatitis is a symptom rather than a disease. For example, if the hot spot is in the pre-auricular area, a thorough evaluation of the ear canal is essential; if the hot spot is on the caudal trunk, the anal glands should be examined and flea infestation suspected. If recurrent episodes of pyotraumatic dermatitis occur, identifying and treating the underlying disease is crucial for long-term success, although how aggressively the diagnosis of the cause is pursued depends on the patient, owner and the frequency and severity of the hot spots. The major underlying causes, and associated clinical features, are listed in Table 1.

In our clinic, therapy is based on the breed, individual patient, severity of skin changes and results of an impression smear taken from affected skin and stained with a Gram or modified Wright stain. Typically, neutrophils and cocci are identified, and eosinophils are occasionally found. The initial approach to these lesions is similar, whether they are acute or recurrent:



**Figure 1**  
Typical clinical appearance of a hot spot on the lateral thigh of a Bull mastiff.

**Table 1**

### Conditions and common underlying causes associated with pyotraumatic dermatitis

- Hot, humid weather
- Dense hair coat that may not dry out easily or may accumulate dirt
- Clipper burn
- Anal sac impaction
- Otitis externa
- Flea bite hypersensitivity
- Scabies
- Atopy
- Adverse reaction to food

- The overlying and surrounding hair should be clipped away to reveal the full extent of the lesion – this approach may require sedation.
- The surface must be cleaned with an antimicrobial wash, such as chlorhexidine, and then gently dried.
- Examine the lesions to ensure that deep infection is not present. Indications that furunculosis is present include a palpable thickening of the lesion, satellite lesions and discharging sinus. If deep infection is present, systemic antibacterial infection is indicated.
- Concurrent topical anti-inflammatory and antibacterial therapy achieves the most rapid resolution (1, 2). Topical astringents have been used traditionally (2), but, although, they may produce a rapid drying of the surface they are less effective than glucocorticoids at producing relief for the dog and owner.
- Re-examine the dog after 3-5 days to check that the condition is resolving. Failure to resolve promptly, or recurrence, should prompt a work up for underlying disease.

## REFERENCES

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