Chinchillas
Alopecia

BASICS

DEFINITION
Alopecia is common in chinchillas and is characterized by complete or partial lack of hair in abnormal areas. It may be multifactorial and can be either a primary or secondary disorder. As many as 60 hairs grow from a single hair follicle in the healthy chinchilla.

PATHOPHYSIOLOGY
- Multifactorial causes
  - All disorders represent a disruption in growth of the hair follicle due to infection, inflammation, trauma, or blockage of the receptor sites for stimulation of the cycle.

SYSTEMS AFFECTED
- Skin/exocrine
  - Behavioral—may cause self-inflicted chewing, biting
  - Gastrointestinal—especially dental disease—may cause anorexia, dysphagia, chewing, biting
- Hemic/lymphatic/immune
  - Ophthalmic—ophthalmic or dental disease may cause epiphora, conjunctivitis resulting in alopecia surrounding one or both eyes.

GENETICS
- Dental disease: avoid breeding these animals that fur chew.

INCIDENCE/PREVALENCE
- Common condition in chinchillas

GENETICS
- Multifactorial causes
- Poor husbandry: lack of dust baths, proper accumulation of scale in matted areas
- Trauma
  - Bite wounds—alopecia with or without erythema, can abscess—secondary Staphylococcus spp. or Streptococcus spp. infections
  - Fur slip—alopecia with or without erythema, no scaling
  - Ear trauma, including frost-bite alopecia with erythema, scaling, necrosis of pinnae
  - Fur chewing—may chew on fur constantly or intermittently and fur may regrow in between episodes. Usually chew dorsal flanks and sides, pregnant females may chew temporarily
- Dental disease—facial moist dermatitis associated most commonly with pyorrhea or pphthora; alopecia; with or without erythema, scale, or ulceration. Staphylococcus spp. or Streptococcus spp. infections can occur secondary to moist dermatitis.
- Dermatophytosis—Dermatophyton menagropyrum most common but Microsporum canis and M. gypseum have been identified; partial or complete alopecia with scaling and pruritus; with or without erythema, not always ring-shaped; may begin as alopecia around eyes, nose; then spreads to feet, body, genitals. May be first identified on the “grooming claw” (medial first digit) of hind limbs.
- Contact dermatitis—reported in chinchillas, lesions usually located in the intrascapular or tail-base region and associated with large amounts of white scale. Marks readily identified on skin scrapes or acetate tape preparations on low power.
- Urinary tract infection—perineal moist dermatitis; alopecia; with or without erythema, scale, or ulceration
- Arthritis of hind limbs—perineal moist dermatitis; alopecia; with or without erythema, scale, or ulceration
- Lambar spinal spondylosis—perineal moist dermatitis; alopecia; with or without erythema, scale, or ulceration
- Abscesses—anywhere on body alopecia with or without erythema, scale, ulceration
- Ear mites—alopecia around base of ear; may extend to head, neck, abdomen, perineal region, intense pruritus; brown or gray crusty exudate in ear canal and pinna
- Fleas—patchy alopecia; fleas will help differentiate; secondary pyoderma sometimes seen
- Contact dermatitis—alopecia with or without erythema; scale on ventral abdomen and other contact areas
- Moist dermatitis—alopecia, with or without erythema, scale, or ulceration associated with...
Chinchillas

(Continued)

Alopecia

NURSING CARE
Subcutaneous fluids can be administered (50–100 mL/kg) as needed; IV access is difficult in the chinchilla; lateral subphrenic vein catheters often kink; consider intravenous (IV) catheterization if intravascular fluids are needed. Base fluid selection on the underlying cause of fluid loss. In most patients, Lactated Ringers solution or Normosol crystalloid fluids are appropriate. Maintenance fluids are estimated at 100 mL/kg/day.

ACTIVITY
Dust baths should be administered at least 2–3 times weekly—minimize during treatment for infectious organisms (especially dermatophytes); do not reuse dust bath. Use only good-quality dust bathing materials.

DIET
Some chinchillas will develop inappetence. Be certain the chinchilla is eating, or provide assisted feeding or feeding of an herbivore critical diet if anorectic to prevent the development, or exacerbation of, gastrointestinal dystrophy/GI stasis.

IMAGING
Increased water content in foods or via oral or parenteral fluids may increase fluid intake. Provide multiple sources of fresh water, including supplementing fresh water with small amounts of pure fruit juice (no added sugars), high water content vegetables, or soaking or steaming fresh vegetables before offering.

CLIENT EDUCATION
Do not breed animals with malocclusion, as they chew their own fur, as both traits are potentially hereditary.

DIAGNOSTIC PROCEDURES
Skin scrapings—micro-spatula with flat-ended blade preferable; dull edge of scalpel blade

SKIN BIOPSIES—especially with suspicion of neoplasia, infectious organisms

DISINFECTION
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PATHOLOGIC FINDINGS
Gross and histopathologic findings will differ depending upon the underlying condition.

TREATMENT

APPROPRIATE HEALTH CARE
Patients that appear otherwise normal are typically managed as outpatients; diagnostic evaluation may require brief hospitalization.

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Dermatophytes—itraconazole (5 mg/kg PO q10–14d); griseofulvin (25 mg/kg PO q24h) for 6–8 weeks; fluconazole (16 mg/kg SC q10–14d); selamectin

Dermatophytes—Ketoconazole has been utilized for dermatophytes in other species—safety and 

ALTERNATIVE DRUGS

None

POSSIBLE INTERACTIONS

None

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DRUG(S) OF CHOICE

Itraconazole (5 mg/kg PO q10–14d) for 4–6 weeks; fluconazole (16 mg/kg PO q24h) for 6-8 weeks; Ketoconazole (5 mg/kg PO q24h) for 6–8 weeks; fluconazole (16 mg/kg PO q24h) for 6–8 weeks

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ALOPECIA

Chinchillas

Efficacy are unknown in chinchillas. Hepatopathy reported in cats and dogs can be severe.

FOLLOW-UP

PATIENT MONITORING

Varies with cause

PREVENTION/AVOIDANCE

- Provide good-quality dust baths several times weekly to maximize coat quality.
- Feed diets with balanced protein and fiber for chinchillas.
- Separate animals that barber or fur chew from other animals.

POSSIBLE COMPLICATIONS

N/A

EXPECTED COURSE AND PROGNOSIS

- Treatment times for dermatophytosis are long (4–8 weeks); treatment diligence necessary to clear infection; continue until two negative cultures are obtained.

MISCELLANEOUS

ASSOCIATED CONDITIONS

- Dental disease
- Musculoskeletal disease

AGE-RELATED FACTORS

N/A

ZOOONOTIC POTENTIAL

Dermatophytosis and Cheyletiella can cause skin lesions in people.

PREGNANCY/FERTILITY/BREEDING

- Do not breed animals with malocclusion or that fur chew, as both traits are potentially hereditary.
- Griseofulvin contraindicated in pregnant animals during first two trimesters as it can be teratogenic.
- Avoid vermectin in pregnant animals.
- Ringworm (dermatophyte)
- Fur chewing (self-induced barbering)

SEE ALSO

Dermatophytosis

ABBREVIATIONS

DTM = dermatophyte test medium
GI = gastrointestinal

INTERNET RESOURCES

Suggested Reading


Author

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