Skin conditions involving the head and face of the cat can look similar but have very different causes. Use the pictures in addition to clues from the signalment to match each picture with the definitive diagnosis. In a clinical setting, you would have the benefit of many additional pieces of information, such as physical examination, history, and diagnostic tests—this exercise does not suggest that diagnosis should ever be made on appearance alone, and it is unlikely that the reader will make the correct diagnosis in all cases.

Empirical therapy based on a tentative diagnosis should not be attempted in many of these diseases. Immunosuppressive therapy is strongly contraindicated when infectious disease has not been ruled out.

Choose from the list of diagnoses in red; each disease corresponds with only one picture.

See pages 18 and 19 for the correct answers and brief explanations.

CRYPTOCOCCOSIS  
DERMATOPHYTOSIS  
DIRTY-FACE DISEASE  
DRUG ERUPTION  
FOOD ALLERGY  
HERPESVIRUS INFECTION  
INDOLENT ULCER  
MOSQUITO BITE HYPERSENSITIVITY  
NOTOEDRIC MANGE  
PEMPHIGUS FOLIACEUS  
SQUAMOUS CELL CARCINOMA  
YEAST (Malassezia) DERMATITIS
6-month-old indoor Siamese

3-year-old indoor Persian

3-year-old indoor/outdoor domestic shorthair

4-year-old indoor Siamese

7-month-old indoor/outdoor domestic shorthair

11-year-old indoor domestic longhair

1-year-old indoor Siamese X

4-year-old indoor domestic shorthair

5-year-old outdoor domestic shorthair
4-year-old indoor Siamese: Yeast (Malassezia) infection

This cat is wearing an Elizabethan collar because of the severity of pruritus. The previous week, he scratched his cornea as a result of the ferocious itching. Facial pruritus should generate a list of differentials, including food allergy, atopic dermatitis, dermatophytosis, and ectoparasitism (Notoedres, Otodectes, Cheyletiella, chiggers). Skin scrapings and tape preparations showed no parasites, but the tape preparations indicated moderate numbers of yeast organisms under high-power magnification. Pruritus decreased by 80% after treatment with oral itraconazole. It is likely that this cat’s yeast infection is secondary to an underlying allergic condition.

3-year-old indoor Persain: Dirty-face disease

“Dirty-face disease” is a syndrome of uncertain cause. Persian and Himalayan cats are markedly predisposed. Sometimes yeast (Malassezia dermatitis) complicates the presentation, but many cats do not improve with standard systemic antifungal therapy.

13-year-old indoor domestic shorthair: Pemphigus foliaceus

This elderly cat has the extensive crusting on the nose and ears typical of pemphigus foliaceus. Pustules are the primary lesions but are infrequently found on the face. They more commonly occur on the body, around the claws, and around the nipples. Biopsy and cytologic evaluation of early lesions assist in making the diagnosis. Infection should be ruled out before immunosuppressive therapy is initiated. Although many cats with pemphigus foliaceus respond well to treatment, this cat rapidly developed uncontrollable diabetes, and the condition continued to worsen.

6-month-old indoor Siamese: Dermatophytosis

Dermatophytosis should be suspected in any kitten with skin lesions. Fungal culture is necessary to confirm the diagnosis. Lesions are not always inflammatory and crusted, but this degree of inflammation indicates that the animal is probably mounting a response toward the fungus. Both topical and systemic treatments are indicated to decrease contamination in the environment and to decrease the risk for zoonosis. Other differentials include trauma and focal bacterial infection.

3-year-old indoor/outdoor domestic shorthair: Mosquito bite hypersensitivity

The appearance of this cat’s face is highly suggestive of mosquito bite hypersensitivity. The lesions usually occur on the dorsal nose and the pinnae, and ulcerated nodules may occur at the edges of the footpads. They are more painful than pruritic. This is a seasonal condition in most environments, and marked improvement occurs with 1 week of indoor living. Biopsy is usually compatible with an eosinophilic dermatosis/hypersensitivity and allows you to rule out neoplasia. The mosquito apparently prefers to feed from the cat in areas where there is little to no hair, hence the anatomical location of the lesions. Historically, the lesions become progressively worse from 1 year to the next. Use of topical mosquito repellents is problematic with cats, and cats often develop resistance to corticosteroids. Changing the lifestyle of the cat is the most successful management strategy.

5-year-old indoor/outdoor domestic shorthair: Cryptococcosis

The ulcerated nodular appearance of these lesions suggests that it would be prudent to wear gloves when handling this cat—they typify an intermediate or deep fungal infection. Sporotrichosis, which is highly zoonotic, can appear visually similar. Direct impression smears should be collected and examined microscopically. Culture and biopsy are usually necessary to confirm the diagnosis; in this case, the deformity within the nose suggests cryptococcosis rather than sporotrichosis. Treatment is protracted, and prognosis for cure is guarded.
5-year-old outdoor domestic shorthair:
Notoedric mange
This outdoor, somewhat feral cat has had a chronic, pruritic, facial dermatosis resulting in self-trauma, erythema, and alopecia. The degree of self-trauma and the outdoor environment leads one to consider mites before an elimination diet to test for an adverse food reaction. Skin scrapings revealed the mite, and the cat responded nicely to parasiticide treatment.

1-year-old indoor Siamese X:
Indolent ulcer
This lesion is a fairly typical, chronic upper lip ulcer in a young adult cat. Origin of the ulcer is unknown. It can recur despite a good response to corticosteroid therapy. The patient may have eosinophilic granulomas or plaques concurrently. If the lesion is irregular or extends into the nasal pad, neoplasia should be considered a possible differential diagnosis.

11-year-old indoor domestic longhair:
Drug eruption
The history would have been quite beneficial in this case. This cat was hyperthyroid and receiving methimazole (Tapazol) as treatment. Although drug eruptions can occur from any drug, methimazole is known in particular to cause a pruritic facial dermatosis that can mimic food allergy. It is usually necessary to discontinue the drug and use some other form of therapy. Decreasing the dose occasionally resolves the clinical signs.

7-month-old indoor/outdoor domestic shorthair:
Herpesvirus infection
This young cat has had a chronic history of sneezing and drainage from the eyes and nose. More recently, an ulcerative/erosive facial dermatosis has occurred. History and biopsy findings will help to define this as a chronic viral infection. Response to therapy is usually not very rewarding—the condition is chronic and tends to worsen, leading to euthanasia.

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12-year-old outdoor domestic shorthair:
Squamous cell carcinoma
This elderly, white outdoor cat has a destructive lesion on the front of the nasal planum. There is erosion, ulceration, and deformation, which raises suspicion of neoplasia. It is probably not mosquito hypersensitivity because it does not involve the top of the nose. It is an actinic change that has progressed to squamous cell carcinoma. A biopsy would differentiate precancerous solar changes from squamous cell carcinoma, which was the definitive diagnosis in this pet.

4-year-old indoor domestic shorthair:
Food allergy/adverse food reaction
This cat has intense pruritus of the head. Differential diagnoses should include notoedric mange, other mites, and secondary infection (especially with yeast). Less likely considerations include atopic dermatitis and contact dermatitis (irritant or allergic). This cat responded well to 5 weeks of an elimination diet. Challenge with the old diet precipitated the pruritus, and fish was eventually identified as the cause.

5-year-old outdoor domestic shorthair:
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