CASE EXAMPLES:
CHRONIC NONHEALING WOUNDS

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Chronic poorly healing wounds or draining wounds in the dog and cat are often a diagnostic challenge to the veterinarian. Appropriate diagnostic steps should be undertaken because some causes of chronic nonhealing or draining wounds can be life-threatening, problematic to treat, or even zoonotic. Diagnostic steps including cytology, biopsy and histopathology, culture and susceptibility, serology, and diagnostic imaging are important to achieve an accurate early diagnosis. This is important because once the process becomes longstanding, it is more difficult to achieve an accurate diagnosis and therapy is less rewarding.

Draining wounds or fistulous tracts are defined as a tract that connects an area or focus of inflammation to the skin surface. Tracts that develop from subcutaneous (particularly multiple) nodules often have an underlying primary bacterial or fungal process. Wounds that do not appear to heal with initial medical and/or surgical treatment are considered chronic nonhealing wounds.

DIAGNOSTIC STEPS

Each patient that presents with chronic nonhealing or draining wounds should be worked up according to the most likely diagnosis based on the history and results of the physical examination of the patient. It is important to determine pertinent information about the onset of disease, any history of trauma or surgery in the region of the lesion, prior diagnostic procedures, and response to therapy. If a systemic bacterial or fungal process is suspected, an ophthalmologic and dermatologic examination is recommended. Initial tests to be performed include cytology, culture and susceptibility, and biopsy. A minimum database should be collected including a complete blood count, serum biochemical profile, and urinalysis. Diagnostic imaging may be warranted early, particularly when there has been prior surgical intervention, trauma, or history of a wound in the region.

- History
- Physical examination
- Minimum data base (CBC, Profile, UA)
- Dermatologic, ophthalmologic exams
- Other tests
  - Diagnostic imaging
    - Plain radiography
    - Sinography
    - CT imaging
    - Ultrasonography
  - Cytology FNA of the lesion, +/- draining lymph node
  - Culture and susceptibility testing
    (bacterial, fungal)
  - Biopsy (special stains)
  - Serology

DIFFERENTIAL DIAGNOSES

Although there are numerous bacterial, fungal (yeast, algae), and parasitic causes for chronic draining wounds, most surgical diseases are caused by noninfectious causes. Refer to the articles listed in the references for a complete index of infectious causes for chronic nonhealing wounds and draining tracts in dogs and cats. Foreign bodies, intertriginous dermatitis, anal sac fistulas, osteomyelitis, bulla osteitis, interdigital cysts, neoplasia, mechanical damage, self-trauma, calcinosis circumscripta, suture reaction or nidus, and dermoid sinus are surgically treatable diseases.

References