

Lameness in Dogs

Basics

OVERVIEW

- “Lameness” is a clinical sign
- Lameness is a disturbance in gait and locomotion in response to pain, injury, or abnormal anatomy

GENETICS

- Depends on specific disease

SIGNALMENT/DESCRIPTION OF PET

Species

- Dogs

Breed Predispositions

- Depend on specific disease

Mean Age and Range

- Depend on specific disease

Predominant Sex

- Depends on specific disease

SIGNS/OBSERVED CHANGES IN THE PET

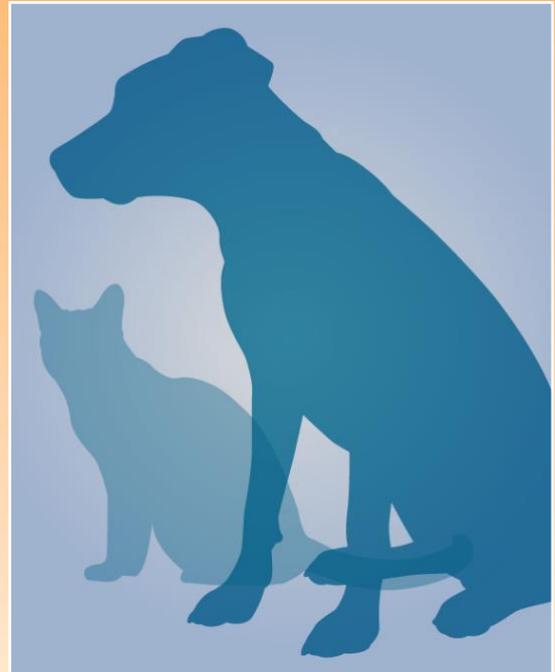
- Lameness—may involve one or more legs; varies in severity from subtle lameness to non-weight-bearing (that is, carrying the leg)
- Lameness may be better or worse after rest or after activity
- If only one front leg is involved—head and neck moves upward when the affected leg is placed on the ground and drops when the sound leg bears weight
- If only one hind leg is involved—pelvis drops when affected leg bears weight, rises when weight is lifted
- If both hind legs are involved—front legs are carried lower to shift weight forward
- Nervous system signs possible
- Posture may be abnormal when standing, getting up or laying down, or sitting
- Abnormal gait may be seen when walking, trotting, climbing stairs, or doing figure-eights
- May have loss of muscle mass (known as “muscle atrophy”)
- Bones and/or joints may be abnormal
- Decreased range of motion
- Pain
- Grating detected with joint movement (known as “crepitus”)

CAUSES

Front Leg Lameness

Growing Dog (Less than 12 Months of Age)

- Osteochondrosis of the shoulder
- Shoulder dislocation (luxation) or partial dislocation (subluxation)—congenital (present at birth)
- Osteochondrosis of the elbow



- Ununited anconeal process
- Fragmented medial coronoid process
- Elbow incongruity
- Avulsion (full tear) or calcification of the flexor muscles—elbow
- Asymmetric growth of the radius and ulna (bones of the foreleg)
- Panosteitis
- Hypertrophic osteodystrophy
- Trauma—soft tissue; bone; joint
- Infection—local; generalized (systemic)
- Nutritional imbalances
- Congenital (present at birth) abnormalities

Mature Dog (Greater than 12 Months of Age)

- Degenerative joint disease (progressive and permanent deterioration of joint cartilage)
- Bicipital tenosynovitis
- Calcification or mineralization of supraspinatus or infraspinatus tendon
- Contracture of supraspinatus or infraspinatus muscle
- Soft-tissue or bone cancer—primary; metastatic (cancer that has spread)
- Trauma—soft tissue; bone; joint
- Panosteitis
- Polyarthropathies
- Polymyositis
- Polyneuritis

Rear Leg Lameness

Growing Dog (Less than 12 Months of Age)

- Hip dysplasia
- Avascular necrosis of femoral head—Legg-Calvé-Perthes disease
- Osteochondritis of stifle
- Patella luxation—medial or lateral
- Osteochondritis of hock
- Panosteitis
- Hypertrophic osteodystrophy
- Trauma—soft tissue; bone; joint
- Infection—local; generalized (systemic)
- Nutritional imbalances
- Congenital (present at birth) abnormalities

Mature Dog (Greater than 12 Months of Age)

- Degenerative joint disease (progressive and permanent deterioration of joint cartilage), secondary to hip dysplasia
- Cruciate ligament disease
- Avulsion of long digital extensor tendon
- Soft-tissue or bone cancer—primary; metastatic (cancer that has spread)
- Trauma—soft tissue; bone; joint
- Panosteitis
- Polyarthropathies
- Polymyositis
- Polyneuritis

RISK FACTOR

- Breed (size)
- Overweight
- Strenuous activity

Treatment

HEALTH CARE

- Depends on underlying cause

ACTIVITY

- Depends on underlying cause

DIET

- Depends on underlying cause
- Reducing diet, if dog is overweight or obese to decrease stress on joints

SURGERY

- Depends on underlying cause

Medications

Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered as all inclusive

- Pain relievers (known as “analgesics”) and nonsteroidal anti-inflammatory drugs (NSAIDs)—minimize pain; decrease inflammation; NSAIDs include such drugs as meloxicam, carprofen and deracoxib
- Medications intended to slow the progression of arthritic changes and protect joint cartilage (known as “chondroprotective drugs”), such as polysulfated glycosaminoglycans, glucosamine, and chondroitin sulfate—may help limit cartilage damage and degeneration; may help alleviate pain and inflammation

Follow-Up Care

PATIENT MONITORING

- Depends on underlying cause

PREVENTIONS AND AVOIDANCE

- Depend on underlying cause

POSSIBLE COMPLICATIONS

- Depend on underlying cause

EXPECTED COURSE AND PROGNOSIS

- Depend on underlying cause

Key Points

- “Lameness” is a clinical sign
- Lameness is any disturbance in gait and locomotion in response to pain, injury, or abnormal anatomy