JOINT LUXATIONS (DISLOCATED JOINTS)

BASICS

OVERVIEW

- "Luxation" is the medical term for dislocation; it refers to the complete disruption of a joint when the supporting structures (such as ligaments) around the joint are damaged or missing; "subluxation" refers to a partial dislocation or disruption of a joint
- "Laxity" describes the degree of abnormal looseness in the motion of a joint; the greater the looseness, the greater is the likelihood of joint injury, including sprains and partial or complete dislocations

GENETICS

- "Hyperlaxity syndrome" is an inherited disorder in people, in which multiple joints are very loose; puppies may show temporary extreme looseness (hyperlaxity) of the joints, when confined for long periods of time
- Hip dysplasia is a form of inherited looseness (laxity) of the hip joint; development of hip dysplasia is determined by interaction of genetic and environmental factors
- Shoulder dislocation or luxation is an inherited susceptibility in small breed dogs, like the miniature poodle
- "Ehlers-Danlos syndrome" is a group of inherited connective-tissue disorders, in which the skin is very elastic and the joints are highly moveable and loose

SIGNALMENT/DESCRIPTION of ANIMAL

Species

- Dogs and cats

Breed Predilections

- Varies with the joint affected
- Hip—large-breed dogs show clinical signs of hip dysplasia more frequently than smaller breed dogs, but breeds of all sizes can have bone changes characteristic of hip dysplasia on X-rays; cats are affected by hip dysplasia, but it is much less common than in dogs
- Congenital (present at birth) shoulder dislocation (luxation) is more common in miniature breeds, such as the poodle

Mean Age and Range

- Traumatic—any age
- Congenital (present at birth) joint laxity may be seen at 4 to 12 months, with related inflammation of the joint (known as "arthritis" or "degenerative joint disease") showing up later in life

SIGNS/OBSERVED CHANGES in the ANIMAL

- Varies with the joint affected
- Abnormal anatomic or structural position of one bone in relation to the adjoining bone
- Swelling, pain and non-use of the limb usually are seen initially; partial weight bearing may occur with time
- Traumatic dislocations (luxations) may occur at any joint
- Spinal dislocations (luxations) occur as a result of trauma, with sometimes devastating results (such as complete paralysis)
- Stifle or knee—cranial cruciate ligament rupture (known as a "ruptured cruciate") leads to instability and partial dislocation (subluxation) of the stifle; animal may limp or may carry the affected rear leg

CAUSES

- Trauma—displacement of normal joint tissues beyond their elastic limit
- Minimal stress applied to abnormally unstable joints in dogs having joint problems with congenital (present at birth) causes

RISK FACTORS

- Abnormal conformation, causing increased stresses on the joint
- Fatigue, causing muscle weakness and incoordination
- Nervous-system abnormalities

TREATMENT

HEALTH CARE

- Rest, reduce mobility, reduce swelling, control pain
- Stabilize the joint (may be able to restore the joint alignment under anesthesia ["closed reduction"] or may require surgical correction ["open reduction"] under anesthesia) or salvage the limb by removing the source of pain
- Bandage, if the affected joint is at the elbow or lower in the foreleg or at the stifle (knee) or lower in the rear leg
- Cold compresses for 5 to 10 minutes, 4 or 5 times a day initially

ACTIVITY
- Cage rest, until joint stabilization

DIET
- Normal

SURGERY
- Closed reduction under anesthesia may be successful if the support structures are intact and no anatomic aberrations are present; "closed reduction" is the restoration of the joint alignment without surgically entering the joint—the veterinarian will manipulate the bones in such a manner as to return them to their normal positions within the joint
- Failing closed reduction, an "open" surgical approach or "open reduction" may be used; in this case, the veterinarian manipulates the bones while observing the bones and the joint during surgery; the joint is reduced or restored—after reduction, some form of surgical stabilization should be applied to reduce the possibility of the dislocation recurring; after surgical closure, an external support sling often is used to limit movement until the tissues around the joint have healed
- The incidence of the dislocation recurring (reluxation) is high, especially in the case of dislocations (luxations) of congenital (present at birth) cause
- Salvage procedures include prosthetic joint replacement (such as a total hip replacement) where available; surgical removal of bone-to-bone contact points (such as surgical removal of the "ball" of the "ball and socket" hip joint [known as a "femoral head and neck ostectomy"]); and fusing the joint (known as "arthrodesis")

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.

- Nonsteroidal anti-inflammatory drugs (NSAIDs) to decrease pain and inflammation in the joint
- Analgesics to decrease pain

FOLLOW-UP CARE

PATIENT MONITORING
- Always take an X-ray after restoration (reduction) of the joint
- Take follow-up X-rays when the sling is removed, and a few weeks later

PREVENTIONS AND AVOIDANCE
- Keep pet in fenced-in yards
- Keep the sling in place until healing has occurred

POSSIBLE COMPLICATIONS
- Recurrence of the dislocation (luxation) or partial dislocation (subluxation)
- Infection after surgery
- Failure of prosthetic device for joint replacement
- Inflammation of the joint (arthritis)

EXPECTED COURSE AND PROGNOSIS
- Return of function is expected, unless a complication occurs
- High incidence of recurrence of the dislocation (luxation) or partial dislocation (subluxation) makes the prognosis guarded

KEY POINTS
- Abnormal anatomic or structural position of one bone in relation to the adjoining bone
- Swelling, pain and non-use of the limb usually are seen initially; partial weight bearing may occur with time
- High incidence of recurrence of the dislocation (luxation) or partial dislocation (subluxation) makes the prognosis guarded
- Activity and body weight gains increase the likelihood of developing degenerative joint changes (arthritis) in the long term