**Presentation:**
- Fast growing large and giant breed dogs, esp. males
- Young dogs 4-8 months of age (maximum growth rate)
- Homemade diet or supplemented commercial dog food
- Lame-unilateral or bilateral (may be short-stepping gait)
- Joint pain, swelling, crepitus, decreased range of motion
- Muscle atrophy

**Test(s) of choice:**
- Radiographs of affected and contralateral joints
  - Indentation (flattening/saucer shape) of subchondral bone
  - Esp. caudal humeral head; medial humeral condyle
- Contrast radiography or CT imaging may be necessary.
- Arthroscopy
- Serum calcium, phosphorus, vitamin D levels are NOT helpful

**Rx of choice:**
- Surgical / arthroscopic débridement – remove devitalized cartilage, stimulate new cartilage formation
- Exercise restriction, NSAIDs, Nutraceuticals and chondroprotective agents

**Prevention:**
- Exercise restriction  Give puppy time to grow and don’t train too heavily or too early
- Breeding  Do not breed affected dogs and their relatives
- Nutrition – puppy food specific for large/giant breeds, fed based on body cond. score (maintain at 2/5)
  - Do not add supplements. Do not feed adult food to puppies
  - Calcium content should be <3.5 g/1000 kcal and energy density <4 kcal/g (<17% fat)

**Pearls:**
- Osteochondrosis Disturbed endochondral ossification from excessive Ca, P, vitamin D
- Osteochondritis dissecans- Inflammation of subchondral bone; Formation of cartilage flap
  - Often associated with hip dysplasia in dogs
- Horses – Typical presentation is a yearling w/ synovial effusion. Lameness usually absent or mild

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**Zuku Review FlashNotes™**

**Classic Question(s)**

What is the typical signalment and history of a dog with OCD? A horse with OCD?

What are the radiographic findings with OCD?

Name 3 of the 5 most common sites of OCD in dogs.

Name four things to help prevent the development of OCD.

Name one horse breed that may have a hereditary predisposition to OCD.