HIP DYSPLASIA

Presentation:
- **Juvenile** dogs (usually between 3 and 10 mos):
  - Exercise intolerance, bunny-hopping gait,
  - Pelvic limb lameness, difficulty rising,
  - Audible clicking when rising or walking,
  - Shifting weight to thoracic limbs & extension of hocks
  - Pain on hip manipulation, **positive Ortolani sign**

- **Mature** animals: Weight-bearing lameness, pelvic musculature disuse atrophy, pain and crepitus on hip manipulation

Test(s) of choice:
- Pelvic radiographs
  - **OFA** (Orthopedic Foundation for Animals)
    - Subjective; Must be at least 2 years of age
  - **PennHIP protocol** (compression/distraction method)
    - Objective; As young as 16 weeks
    - Distraction index correlates highly with likelihood of clinical disease

Rx of choice:
- Pain control: Acute with NSAIDs, chronic with tramadol, amantadine, gabapentin
- Nutrition: prevent obesity, energy restricted diet, high in omega-3 fatty acids
- Exercise: low impact only
- Joint fluid modifiers
- Surgical
  - Young, w/out degen joint dz (DJD): Juvenile, pubic symphosiodesis or triple pelvic osteotomy
  - Mature with DJD: **Total hip replacement**, femoral head and neck ostectomy

Prognosis: Fair to good: most will have some improvement with medical and surgical intervention.

Prevention:
- Breed based on OFA and PennHIP results; **low impact** exercise, avoid high-energy diets

Pearls: Joint laxity is responsible for early clinical signs and joint changes; multifactorial disease

Classic Question(s)

Name 3 clinical signs for a juvenile and a mature dog with hip dysplasia.

What are 2 radiographic protocols for diagnosing hip dysplasia?

How is hip dysplasia medically treated in the acute case? Chronic case?

Name 2 surgical procedures used in juvenile dogs without DJD? Adults with DJD?