

I Didn't Know Surgery Could Fix That!

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What is the Purpose of this Lecture?

- Discuss less commonly seen disorders
- Ensure recognition
- Gain an understanding of what can be done
- What to expect from treatment



Neurologic Diseases

- Spinal Fractures/Luxations
- Spinal Tumors
- IVDD
 - Lumbosacral Disease
 - Wobbler's Syndrome
 - Cervical and Thoracolumbar



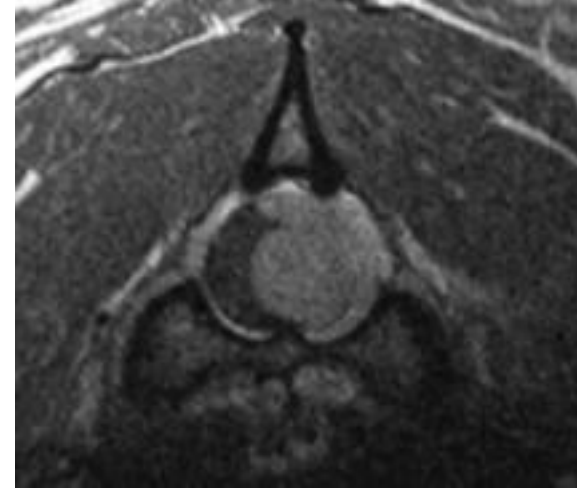
Spinal Fractures/Luxations



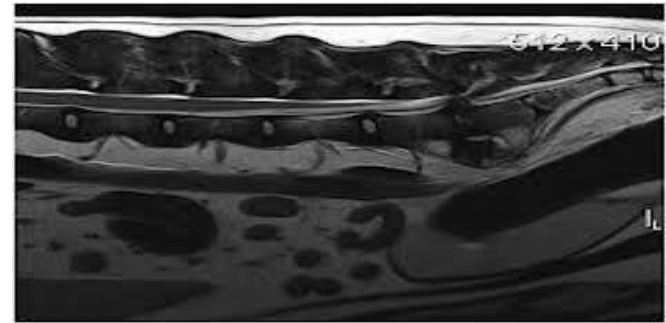
- Common locations
 - Cranial cervical (C2)
 - Thoracolumbar junction
 - Lumbar 7
- ALL THAT MATTERS FOR PROGNOSIS IS DEEP PAIN
 - Don't mistake reflex withdrawal for deep pain
 - 85-90% success if deep pain present
 - <5% success if no deep pain
 - Can still repair if owner is ok with cart forever

Spinal Tumors

- Not a death sentence
- Combination surgery and radiation very effective
 - >1 year survival common with aggressive management
- Types
 - Meningioma most common – cervical especially
 - Nerve sheath tumors
 - Osseous
 - OSA, CSA, FSA, HAS
 - Intraparenchymal tumors



Lumbosacral Disease

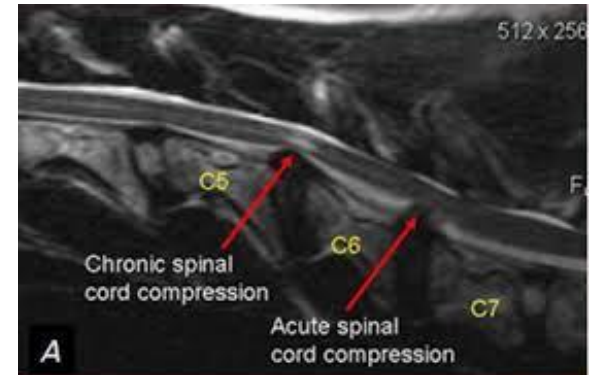


- Approximately 50% respond to medications
 - Most of the time that is some degree of temporary
- Extremely common disease in large older dogs
 - Most common case I see when referred for “hip dysplasia”
- MRI needed to define extent of the disease
- Success with surgery as high as 90%
 - Dorsal laminectomy with discectomy
- Extreme owner satisfaction



Wobbler's Syndrome

- Our understanding is ever-changing from MRI
- 2 basic forms
 - Osseous
 - Soft Tissue
 - Dynamic
 - Static
- The soft tissue types are very responsive to surgery with very good success
- Osseous forms more difficult with variable success



Cervical and Thoracic IVDD

- 3 most important things to remember
 - Surgery has highest success rate at 93%
 - The time to have surgery is not after they've lost deep pain and have been on steroids for 4 days in the hospital
 - Indications for surgery
 - Chronic non-responsive pain
 - Severe ataxia
 - Paraplegia



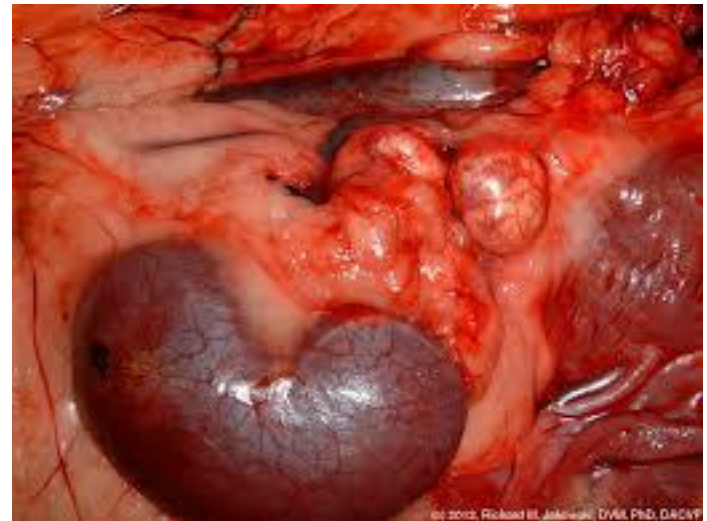
Soft –Tissue/Oncologic Diseases

- Adrenal masses
- Chylothorax
- Large soft tissue masses
- Liver masses
- Mediastinal masses
- Hiatal Hernias
- Perineal Hernias
- Sub-lumbar lymph nodes
- Shunts
- Ureteral stones



Adrenal Masses

- Cortical
 - Carcinoma
 - Adenoma
- Pheochromocytoma
- Very high success rate with surgery
 - Cortical longer MST than pheochromocytoma
 - Can easily reach 3 years
 - Low metastatic rate
 - Higher with pheochromocytoma
- Invasion of the cava
 - Does NOT effect long term survival



Chylothorax

- Survival times have improved over the years
 - Still a little unpredictable, but offers best chance
- Combination surgeries now
 - Thoracic duct ligation
 - Pericardectomy
 - Omentalization
 - Cysterna chyli ablation
 - Pleuro-port placement
- Requires dedicated owner
- Some need continued medical management



Large Soft Tissue Masses

- 2 most important Rules of surgical oncology
 - DO NOT sacrifice margins for closure
 - KISS theory to closure
- Remember, radiation can be your friend!!
- Many, many different flap types described
 - Grafts as well
 - Second intention acceptable in certain locations
- INJECTION SARCOMAS OF CATS SPECIAL!!!



INJECTION SITE SARCOMAS

- CRITICAL!!!!!! ONE CUT = HIGHER SUCCESS
- The best way to manage these tumors is EITHER with extremely aggressive surgery
 - This means amputation when appropriate
- Other body locations, RT and surgery with 5cm margins and 2 fascial planes
- TOTALLY PREVENTABLE!!!!
 - Tail injections
- DO NOT just cut off soft tissue masses in cats, get a small Tru-Cut biopsy first!



Liver Masses

- Belief that right sided masses unresectable
 - Most are resectable
 - Are more difficult
- Important to try to get very good margins
- HCC* can have very long survival times with very low metastatic rates

*Hepatocellular Carcinoma



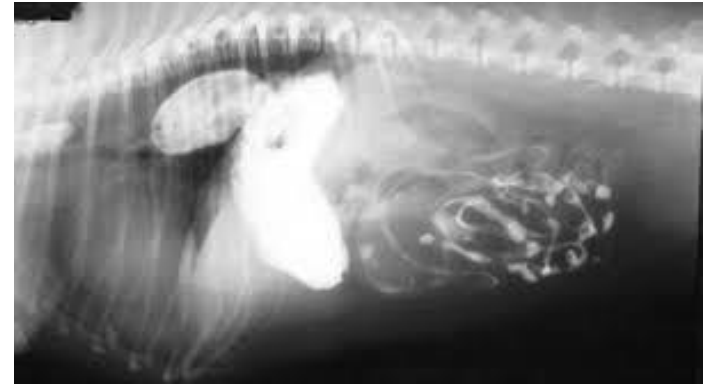
Mediastinal Masses

- Thymoma
 - Cats versus dogs
 - Both good survival overall
- Chemodectoma
 - Very good long term survival (many years)
 - Can be tricky surgery but very successful
- Bad myth that median sternotomy is painful and high complication rate
 - Two infections in 12 years!



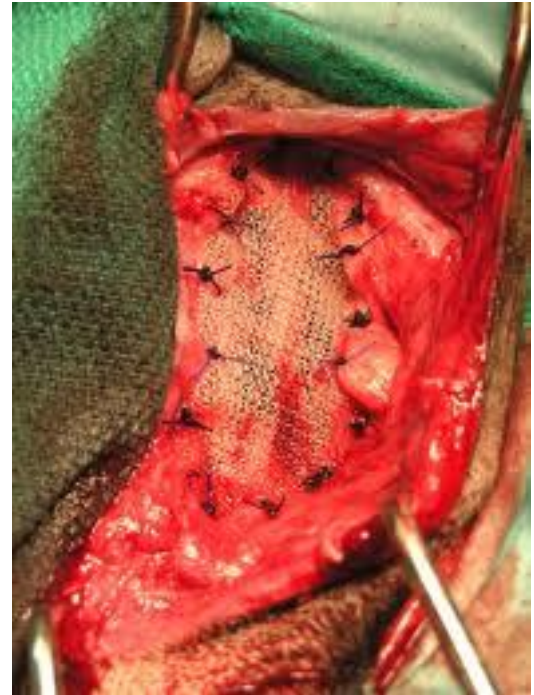
Hiatal Hernias

- The forgotten disease
- Dogs with chronic regurgitation/GI issues
- Brachycephalics
- Shar-Peis
- Surgery very successful for those that don't respond medically
 - 50% respond to medical management only



Perineal Hernias

- Surgery will almost ALWAYS fail if proper flaps are not performed
- Very high success with aggressive surgery including supplemental materials
- Abdominal approach
 - Pexies within the abdomen needed in severe cases
 - Very high success



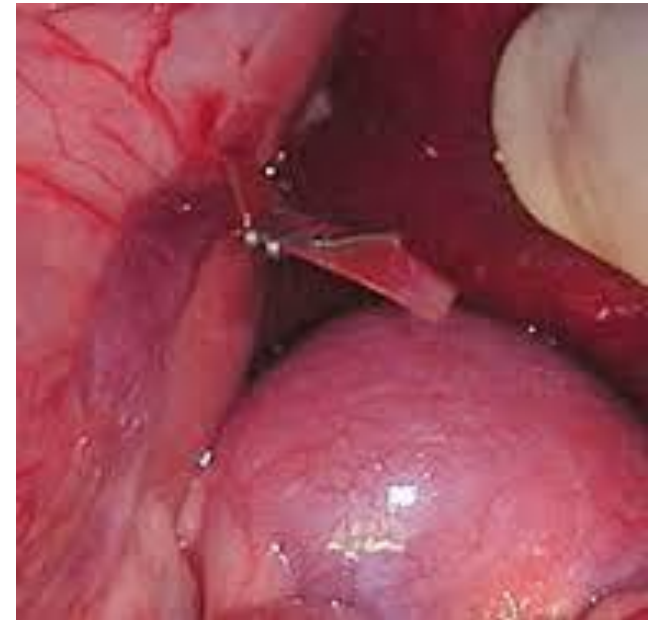
Sub-Lumbar Lymph Nodes

- Anal Sac Tumors as well as other hind end masses
- Do not ignore them if enlarged and just do the mass
 - Longer survival if they are removed when enlarged
- Live between the vessels of the descending aorta branches
- Can be a bloody mess 😊



Shunts

- Extrahepatic and Intrahepatic
- Cellophane versus rings
- Age does NOT matter for prognosis
 - Used to think old dogs didn't do as well
- Minimally invasive techniques for intra
- Over 95% success in dogs
- Cats
 - ~50-75% success
 - Seizures!!!



Ureteral Stones

- Rising star in cats
- CaOx and Dried Clots
- Removal
- Stent and SUB placement for recurrences
- Success depends on severity of illness
- Intense cases
 - Team effort with internal medicine/critical care
 - Long hospital stays



Rib Masses/Thoracic Wall

- Similar to large soft tissue masses
- Can be very successful with large excision
 - May need muscle flaps, skin flaps or mesh
- Chondrosarcoma
 - >3000 days MST
- Osteosarcoma
- Fibrosarcoma
- CT scan critical for planning successful surgery



Maxillofacial Tumors

- Maxillectomy
- Orbitectomy
- Mandibulectomy
- Nosectomy
- ALL can be done successfully, consistently in dogs
- Important to educate owners of cosmesis
- Cats can be more difficult due to eating



Orthopedic Diseases

- Hip Luxations
- Elbow Dysplasia
- Angular Limb Deformities
- Grade 4 patella luxation
- Hip Dysplasia



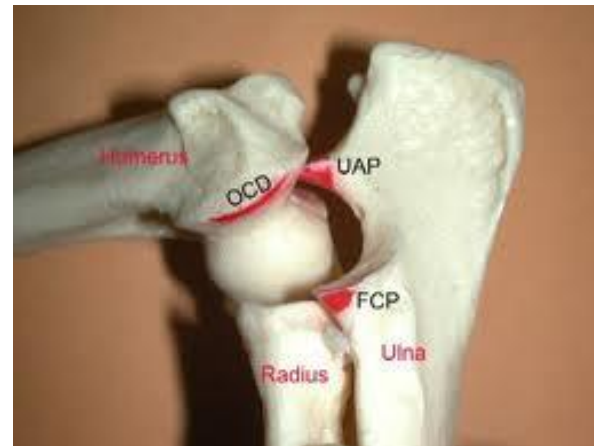
Hip Luxations

- Common misconception that FHO is the surgery of choice
- ALL sizes and ages can have repair successfully
- Don't confuse luxation from dysplasia with traumatic luxations
 - Different treatments may apply



Elbow Dysplasia

- One of the most confusing disorders
- Dogs do NOT just get arthritis of the elbows
 - Its due to a cause that should be addressed
- Arthroscopy is the gold standard of Dx and Tx
 - >50% have normal x-rays!!!
- Supplemental treatments such as stem cells and platelet rich plasma



Angular Limb Deformities

- Corrections of all limbs and all types of deformities possible thanks to CORA*
- Most commonly seen in chondrodystrophic breeds and in puppies with trauma
 - Distal ulnar physis
- Very high success for normal function
- Elbow Incongruity!!!
 - *Center of rotation of angulation



ACL TEARS DO NOT HEAL 😊



Hip Dysplasia

- Try to catch early!!
- No form of laxity in a young dog hip is normal
- JPS a great option
 - <20 weeks ideally
- DPO HIGHLY successful
 - Cheaper than total hip
 - Low complication rate
 - Low morbidity
 - High success
- Total Hip Replacement
 - Gold Standard for adults



Grade 4 Patella Luxation

- Can and SHOULD be repaired
- Very high success
- Amputation is not the answer
- Even if get to grade 1, will not be clinical, but realistic to get to grade 0
- Femoral and tibial osteotomies can be performed as needed
- Congenital vs. traumatic

