

Case Report
Jimmy

NOVOS FORUM MEETING
STOCKHOLM 2017

S. JAUERNIG
DECVS
ANICURA DYRESYKEHUS OSLO

Case Report: Jimmy

- **Signalement:**
 - GSD
 - Male
 - 5 Years old
- **Anamnesis:**
 - Severe lameness of 1 week duration right front leg
 - No trauma anamnesis known
 - Over 2 days deterioration up to non weight bearing
 - NSAID's no effect
 - Improvement with combination Tramadol

Case Report: Jimmy

- **Clinical exam:**
 - Normal
- **Orthopedic examination:**
 - Lameness 6/10 right front leg under painmedication
 - ✦ Rimadyl + Tramadol
 - Shortened swing phasis
 - Extension R shoulder + biceps stretch very painful
 - Swelling cranio-medial of the joint
 - No palpable instability,
 - Goniometry: no clear difference R/L
 - Neck movement slightly painful with bending to R

Case Report: Jimmy

- **Neurological exam:**
 - No neurological deficits
- **Lameness**



Case Report: Jimmy

- **Localization:**
 - R shoulder
 - Neck?
- **Differential Diagnosis:**
 - Neck:
 - ✦ **Extradural spinal cord compression**
 - Trauma (fracture, luxation), intervertebral disk disease, arachnoid cyst, Wobbler, Neoplasia, (Syringomyelia)
 - ✦ **Intradural spinal cord changes**
 - GME, Edema, Fibrocartilagenous infarct, gliosis, neoplasia
 - ✦ **Muscle/ligament injury**

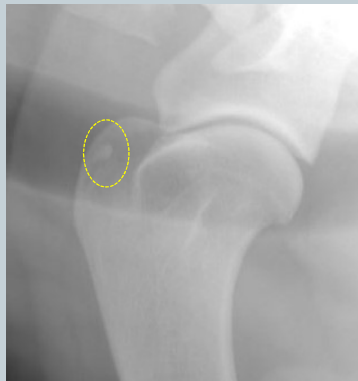
Case Report: Jimmy

- **Differential Diagnosis:**
 - Shoulder
 - ✦ **Shoulder instability:**
 - MSI, LSI, multidirectional
 - ✦ **Bicipital tendon rupture, tendinitis**
 - ✦ **Rotator cuff pathology**
 - M. supraspinatus, M. infraspinatus, M. teres minor, M. subscapularis
 - ✦ **Elbow pathology**

Case Report: Jimmy

- Radiographs:

- Calcification supraspinatus tendon R

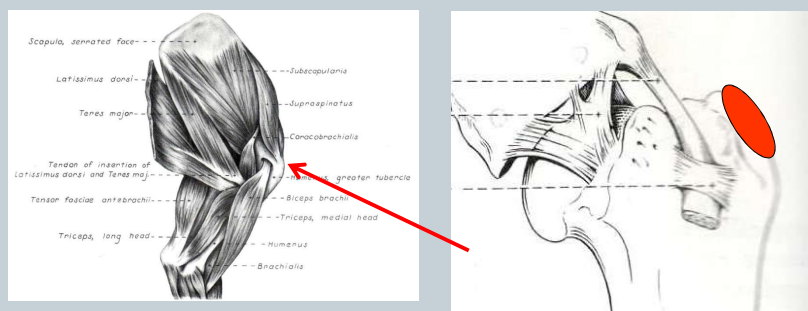


Supraspinatus Muscle

- Anatomy:

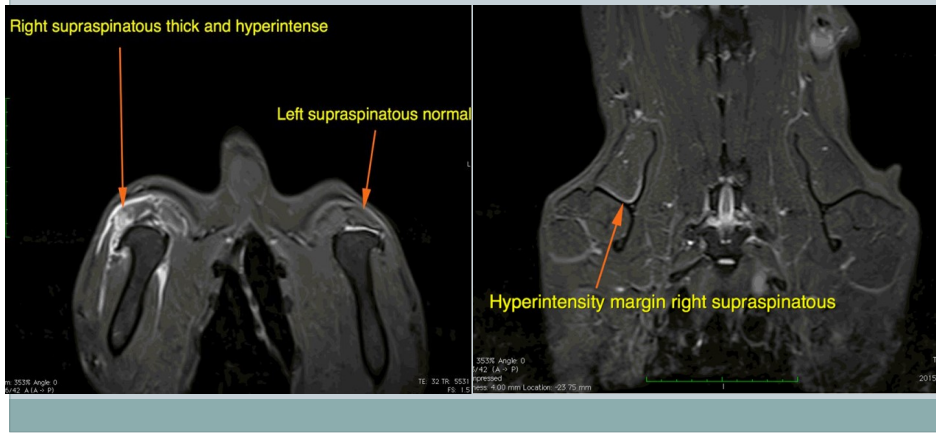
- ✦ Fossa supraspinata (Scapula) → Tub. Major humeri

- Function: extension shoulder joint + advancement of the limb



Case Report: Jimmy

- MRI



Case Report: Jimmy

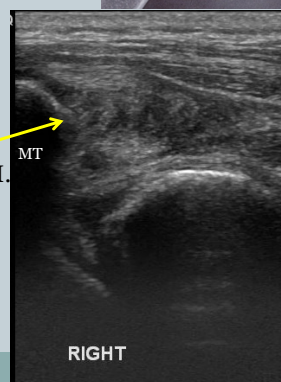
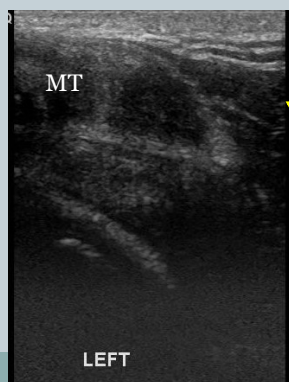
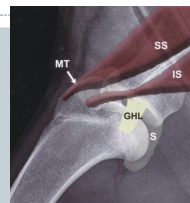
- MRI



Case Report: Jimmy

- **Ultrasound:**

- Enlarged Supraspinatus tendon R
- Irregular hypoechoic areas in the tendon
- Impingement of the bicipital tendon



Supraspinatus M.

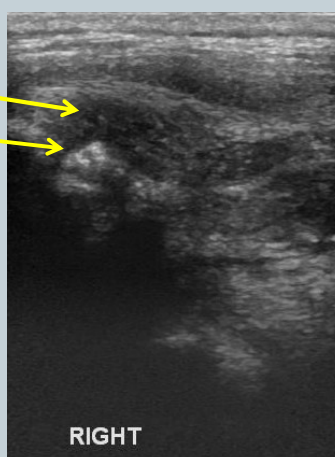
LEFT

RIGHT

Case Report: Jimmy

- **Ultrasound**

- Core lesion with hypoechoic areas
- Calcification



RIGHT

Case Report: Jimmy

- **Therapy:**

- Platelet rich plasma injection in the Core lesion under Ultrasound guidance
 - ✦ ACP = autologous conditioned plasma (Arthrex)
 - ✦ Platelet rich, leukocyte –poor (Gines 2016, Silva 2013..)
 - ✦ Growth factors (especially TGF- β 1 + PDGF-B) (Böttcher 2011)
 - ✦ Reduced amount of proinflammatory cytokines (Gines 2016)
- NSAID's
- Rest
- (Physiotherapy/Hydrotherapy)

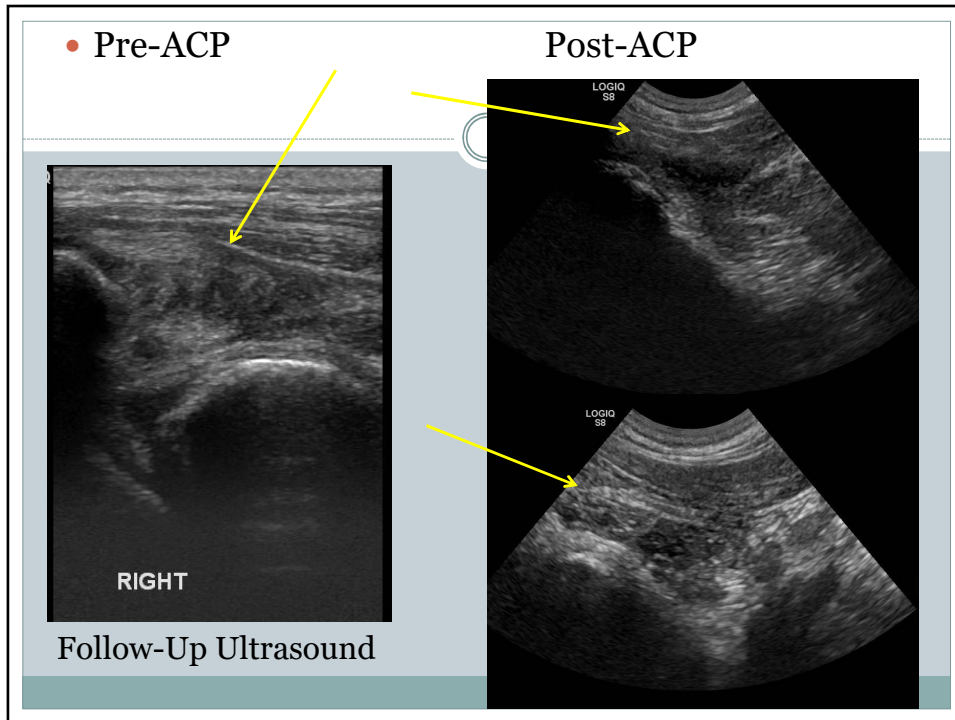


Case Report: Jimmy

- **Follow-up after 2 weeks**

- Free of lameness
- Shoulder slightly painful in extension
- No palpable swelling anymore





Supraspinatus tendinopathy

- Breeds: Labrador, mixed breeds, GSD, GR...
- Degenerative disorder:
 - ✦ Rotator cuff tears
 - ✦ Calcifying tendinitis
 - ✦ Tendinosis
- Cause: probably repeated strain injury
- Clinical signs:
 - ✦ Mostly chronic problem, seldom acute
 - ✦ Varying degrees of lameness
 - ✦ Exercise dependant
 - ✦ Typically resistant to rest and NSAID's

Supraspinatus tendinopathy

- **Diagnosis:**
 - Atrophy of the supraspinatus m.
 - Pain with palpation of the tendon during flexion
 - Acute: swelling of the insertion
 - Diagnostic imaging:
 - ✕ Radiographs: 13% calcification (Canapp 2016)
 - ✕ MRI: hyperintensity of the tendon and insertion
 - ✕ US: hypo-/nonhomogenous echogenicity, thickened tendon
 - ✕ Arthroscopy:
 - Bulge of SST and
 - Additional lesions as MSI, BT pathology... (Canapp et al 2012, 2016)

Supraspinatus tendinopathy

- **Therapy:**
 - NSAID's in acute cases
 - Rest, physiotherapy, hydrotherapy
 - Surgery: removal of calcifications
 - PRP (ACP...), Stemcells, Stemcells + PRP...?
 - Not evidence based
 - Further research needed

