IWBDA 2023 Breeders Workshop

# Superficial Digital Flexor Tendon Avulsion

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# What is SDFT avulsion?

**Abnormal movement of the SDFT occurs resulting in intermittent lameness.**

- Lameness is similar in presentation to patellar dislocation.
- Occasional fluctuating swelling over point of hock (bursitis).
- Not a commonly recognised condition esp. in comparison to patella luxation.

# Comparative anatomy of luxations

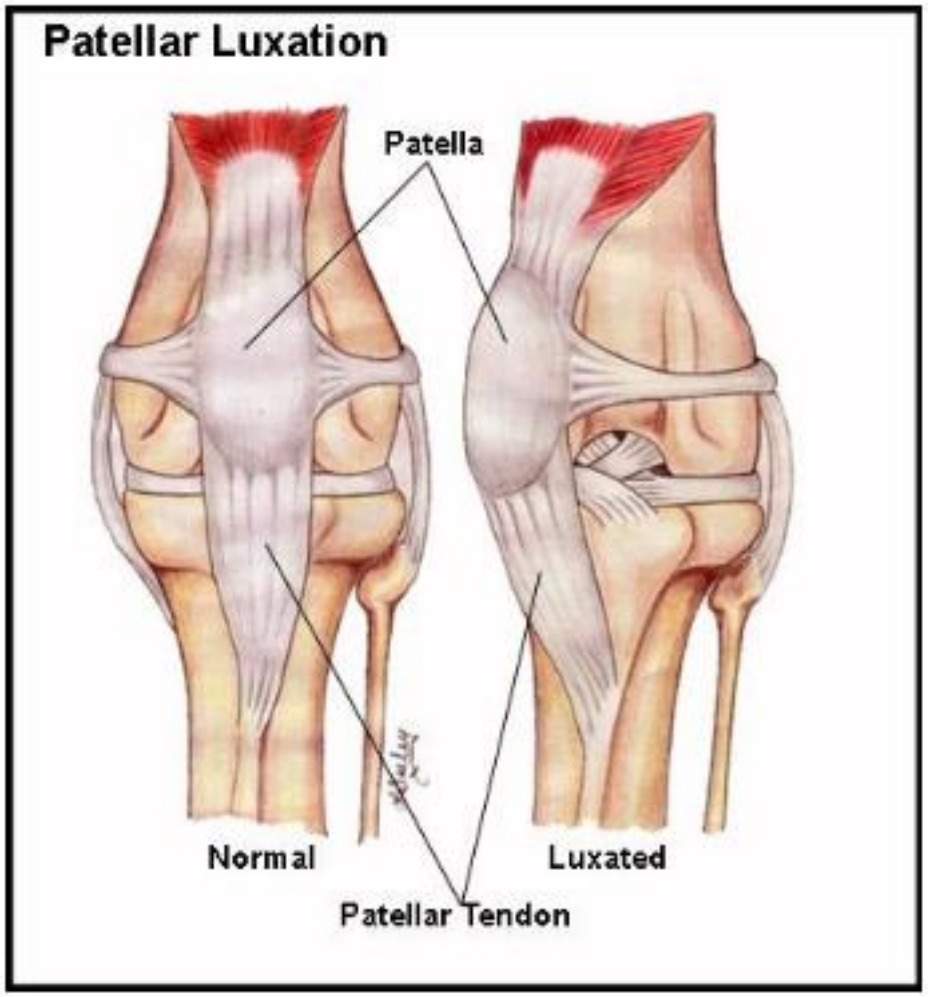


Image courtesy of ***https://urbanpetvet.net/patella-luxation-correction***

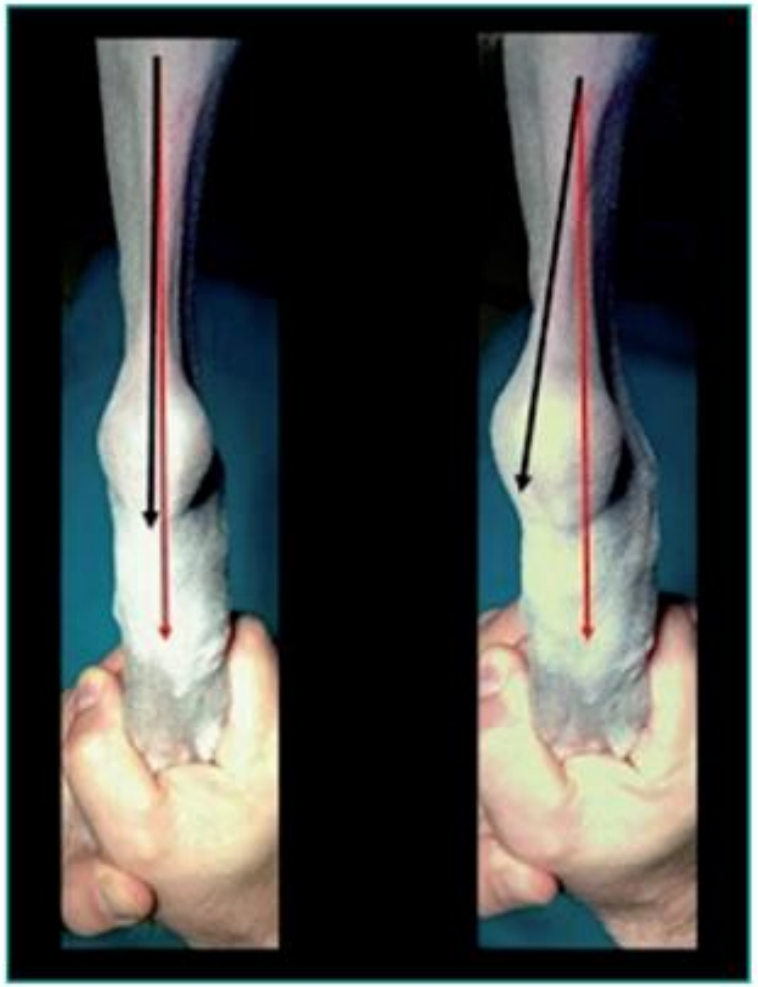

Image courtesy of **Luxation of the superficial digital flexor tendon in a dog: a case report.** ***Veterinaria Vol 29, Issue 6, December 2015.***

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# Video of movement/ lameness

# Video of tendon movement

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# Noteable Points

- Study of Shelties – 62% between 6 and 12 months of age, 74% before 1.5 years of age.
- Initially thought to be trauma related due to occurring in performance Shelties.
- GDN have had 5 cases – 10, 14,15,17 and 22 months of age.
- Mainly during training or around placement time.
- Easy surgery – basically a stitch-up of tissue holding tendon.
- Critical part is the after-care.

# After-care

## GDN Protocol

### Step 1: Immediate Post-operative to 4 weeks

Aim: Allow scar tissue formation around the tendon to assist long term stability

Exercises:

1. No walking aside from leashed toileting
2. No jumping or running
3. Maintain in an area approx. size of small laundry

Modalities:

1. Bandage changed every 5-7 days
2. Ensure foot does not become swollen or moist.

Medications:

1. NSAIDS – anti-inflammatories
2. Gabapentin 100mg as directed



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# After-care

## Step 2: 4 to 8 weeks Post-operatively

Aim: Maintain hock joint in fixed position but encourage movement of other joints.

Exercises:

1. Slow leash walking on flat ground starting at 5 minutes once daily.
2. Gentle “Range of Motion” exercises of other joints.
3. No running or jumping
4. Access to normal home environment.

Modalities:

1. Splint or bandage continued on hock. Monitored for complications.

Medications:

1. NSAIDS – anti-inflammatories.
2. Gabapentin if required.
3. DMSO topically on hock once daily

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# After-care

## Step 3: 8 weeks to 12 weeks post operatively

Aim: Maintain hock range of motion and improve endurance

Exercises:

1. Slow leash walking including slight inclines up to 15 minutes daily.
2. No running or jumping
3. Balance/ Weight shifting exercises – lift the unaffected limb and hold off the ground for 1 minute, if tolerated, slowly increase to 5 minutes at a time. Do not allow the dog to pull against the exercise.

Modalities:

1. Removal of splint/ bandage.
2. Cryotherapy if required – application of ice pack wrapped in a towel for 10-15 minutes after activity.

Medications:

1. Gabapentin if required.

# After-care

## Step 4: 12 weeks and beyond

Aim: Return to normal activity

Exercises:

1. Walking up and down stairs – initially 1-2 flights at a time and working up to 5-6 flights.
2. Slow increase in pace on a walk – moving up to a trot during normal walks.
3. Controlled ball play – for 5 minutes initially then gradually increasing.
4. If lameness develops, decrease activity by 50% for 1 week then increase slowly by 20% weekly.

Modalities:

1. Cryotherapy – if required

Medications:

1. Should not be required.

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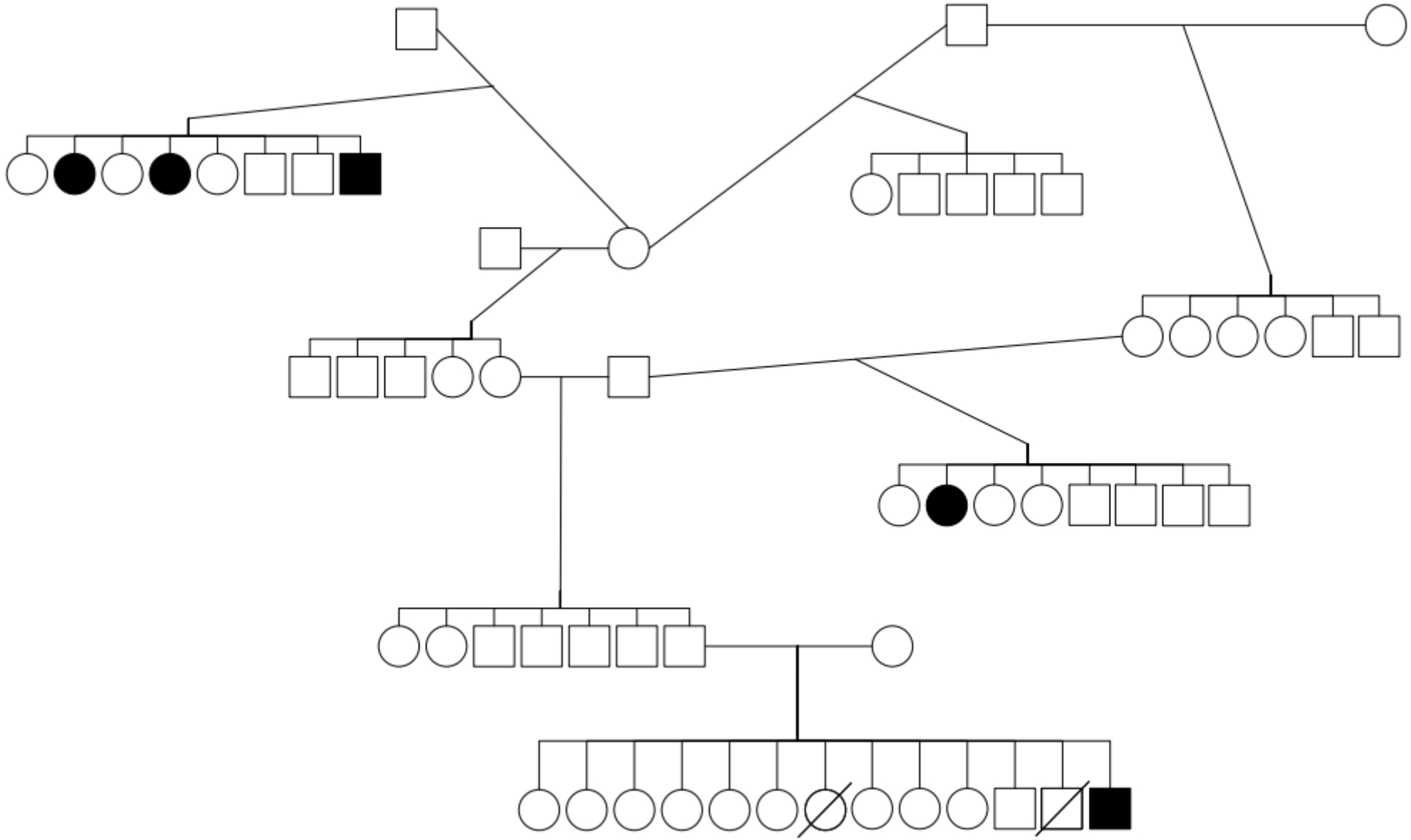


# Genetics and Outcomes

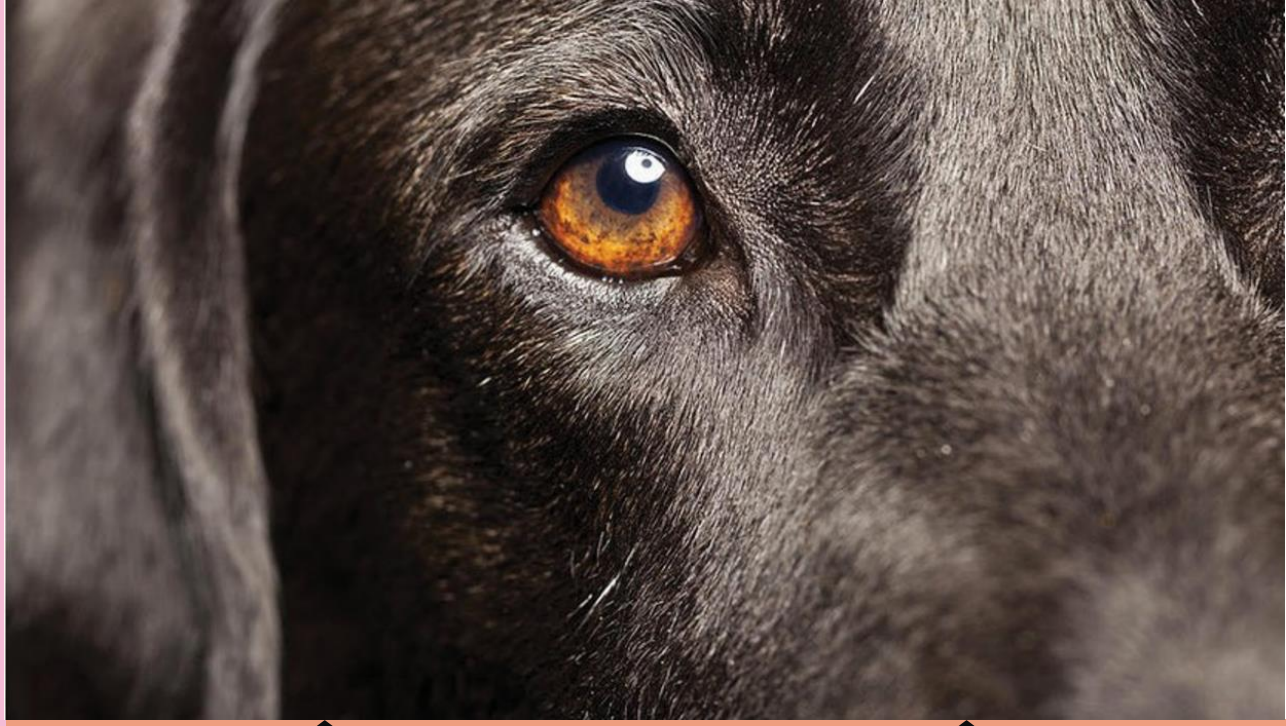
## GENETICS

- Autosomal recessive in Sheltie
- Conformational abnormality of the tip of the calcaneus (point of hock) suspected cause.
- We suspect autosomal recessive in our dogs.

## OUTCOMES

- Three of the dogs placed as Guide Dogs.
- Normal workload and no concerns after placement.
- Diagnosis does not impact outcome of the dog, just impacts on when the dog will be ready for placement.

# Thank you



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