



Classical Horse Training

Combining art with science to achieve balance and harmony



CASESTUDY SHAFÄ - 1995-2019



Disclaimer

This booklet is designed as a case study for personal learning purposes. It does not replace veterinary diagnosis and no definite medical conclusions can be drawn from this document.

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INTRODUCTION

This case study will take you on a journey to the story of the horse 'inside-out'.

Shafaï (1995 – 2019) will tell you his life story through beautiful pictures taken both during his life all the way up to the end at his dissection. Sharing these pictures will allow you to see what is going on inside and how everything is connected. It will give you a deeper understanding and knowledge of the equine species 'inside out'.

We hope you will enjoy this footage, that was made with full respect for Shafaï With this document, his story will never be forgotten and possibly help many other horses worldwide.

A special thanks to Sharon May-Davis and the team of Equinestudies for making this journey possible as well as Eveline Asjes for donating Shafaï so we could give back his voice.

PERSONAL DETAILS

Name horse: Shafai
Sexe: Gelding
Breed: TB Arabian
Date of birth: 15-05-1995
Nutrition: Hay and Vitalbix
Owner: Eveline Asjes
Discipline: Various



HISTORY

Shafai was eight years old when he came into Eveline's life. At the time he was still a stallion. He was used as a companion mate for another stallion by his previous owner, as he was considered not good enough for any of the breed shows. Luckily, with Eveline he found his forever home.



In the first year that he was with Eveline he remained a stallion and even escaped once. During this escape he covered a welsh mare and had one foal. He was gelded after about 9 months of being with Eveline.

As soon as he came to live with Eveline, he was **housed outside 24/7 on a pasture of 1 to 1.5 hectares**. The herd he was housed with was a stable and happy herd.

Throughout his life he wasn't the easiest horse character wise. In general, being social was a bit hard for him. He tended to push and bite both horses and humans.

He was **quite insecure** and would also run after horses that were even more insecure compared to him. Once he found a mate that was equal to him, his behavior changed and he loved to challenge and play.

In his life he was used for many disciplines. He and Eveline did Parelli, cross, a lot of hacks, a little bit of dressage, Academical Art of Riding, jumping, and Eveline even took him on hacks throughout France and the Czech Republic.

As Eveline is also one of the organizers of Equiday - a horse friendly event given in the Netherlands, Shafai appeared on many of the advertisements for this day and was a well-known horse to all the visitors.



The last six years of his life he spend retired. He enjoyed some work about once a week, but more than that would be uncomfortable for his body as he endured some injuries throughout his life.

Once, he was **kicked on the right front leg** which cause a hefty inflammation in this leg. Furthermore, during the trip to the Czech Republic **he injured himself by leaning into the trailer**. This caused muscle dents on his buttocks. Besides that, he also suffered from **esophagus obstructions** – a choke, twice.

However, these injuries aren't what caused him to go into retirement. In 2012 he was first diagnosed with **arthrosis** in the fetlock of his right front leg. This is when Eveline semi-retired him. She fed **glucosamine and devil's claw** to help him pull through the winter's, which luckily he did.

Unfortunately, this wasn't the only place in his body that suffered from arthrosis. A few years after the first diagnosis of his fetlock, it was also concluded that he had arthrosis in the neck at C3/C4/C5 and C4/C5/C6. Naturally, it was hard for him to turn his head and look behind him. However, he was able to enjoy the time in the pasture with his herd.

In the summer of 2018, he also started to show discomfort in his left front knee. Despite feeding the Devil's claw, he **presented with lameness**, but only when someone would ride him in trot. This is when Eveline first started to discuss with vets whether it was better to let him go or not. It was then concluded that he could still enjoy his time outside on the fields.

However, during spring 2019 Eveline noticed that **he wouldn't canter along with the herd anymore and it was hard for him to make turns**. Eveline rightfully took this as a sign that he was worsening. In consultation with the vet she put him on the pain medication Bute.

It was then that she contacted Equinestudies to see if a dissection was an option as she wanted to know what exactly was wrong inside his body. Eventually a dissection was planned in September. This gave Eveline and Shafaï the time to enjoy the summer and spend more time with each other before eventually having to say goodbye.

ASSESSMENT

When the decision was made to donate Shafaï for dissection, a final assessment under supervision of the team of Equinestudies was planned on August 16th 2019.



Upon palpation, **quite a lot of scars** were found on his body. He had scar tissue on the right side of the neck around C5/C6, also known as the *prophet's thumbprint*. This is quite a common phenomenon in Arabians, but as the dissection pictures will reveal later, it is not "innocent".

He also suffered from scars on his *superficial pectorals*, specifically the right at the transition from the pectorals to the *Brachiocephalic* muscle.

Besides that, he had a quite recent scar on his left front knee. On the left shoulder they also felt scar tissue at the *Latissimus Dorsi* and *Serratus Ventralis*. Both muscles felt a little off when palpating them.

Due to the leaning in the trailer on the long trip to the Czech Republic he suffered a dent on his right hindquarter in the *Semitendinosus*, more commonly known as the hamstring.

There were also findings on his muscles. The ***Infraspinatus*** felt **very tight** when palpating this muscle. The muscles of the left front shoulder were atrophied, where the *Latissimus Dorsi* and *Serratus Ventralis* of the left front shoulder are both hypertrophied. On his right hind quarter the ***Tensor Fascia Latae*** was also **very tight**.

When palpating his vertebral column they felt **irregularities on the lumbar spine** . This is an indication of kissing spines. Furthermore they found sharp edges on the mandibular bones. He also suffered an accident which lead to the bump on his chin. It was also found that the TMJ was more sensitive on the left than on the right.



In movement he showed that he was **uncomfortable and very lame on all four legs**. When walking him up and down a small hill it was also clear that his elbows were under strain and his wasn't comfortable with putting weight on them.



DISSECTION

Shafai went peacefully to sleep on September 13th 2019. His dissection took place from September 14th-16th 2019 in The Netherlands with many international participants.

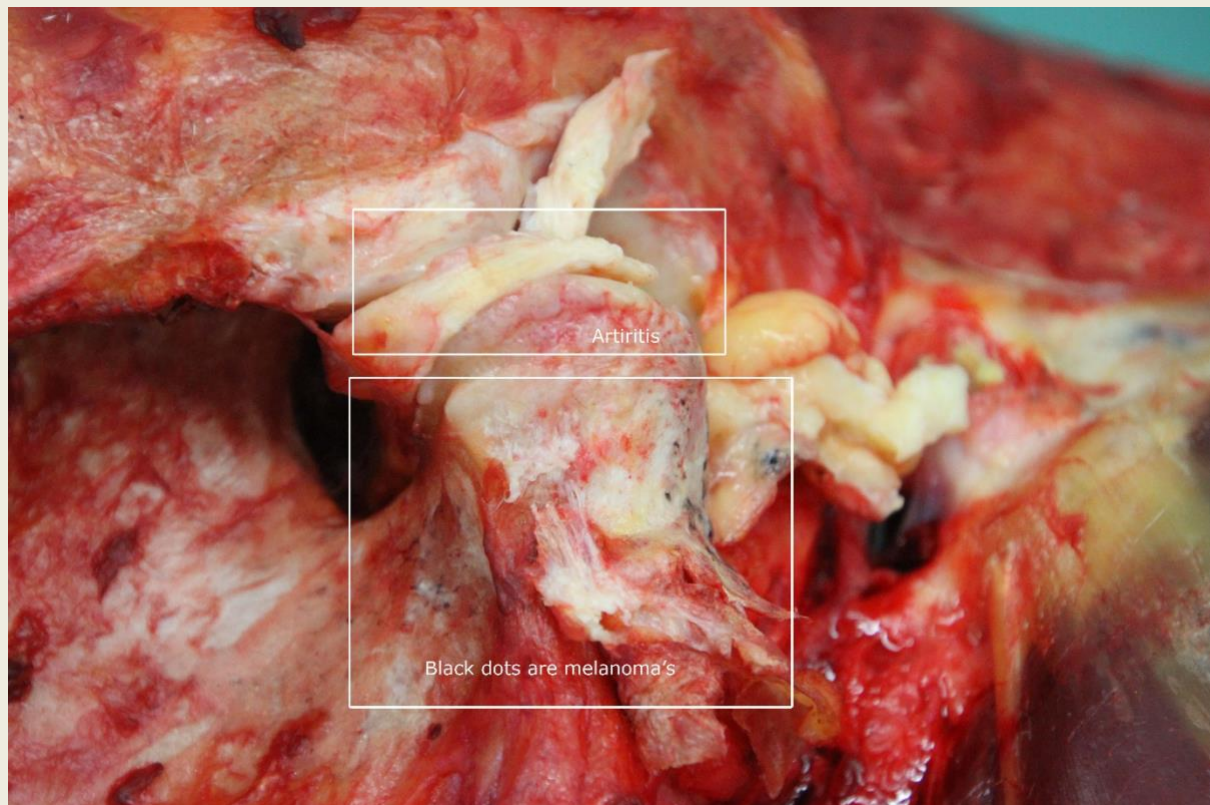


Eveline was there with him during the entire dissection. **Thanks to her presence and bravery, Shafai's story could be completed.** Below you can find an overview of the main findings.

HEAD

During the palpation it was already discovered that he was sensitive on the TMJ and more so on the left side. During dissection they found **osteoarthritis in the TMJ** as well as **pepper grain melanoma's in the joint**. Both of which can explain the sensitivity of the joint.

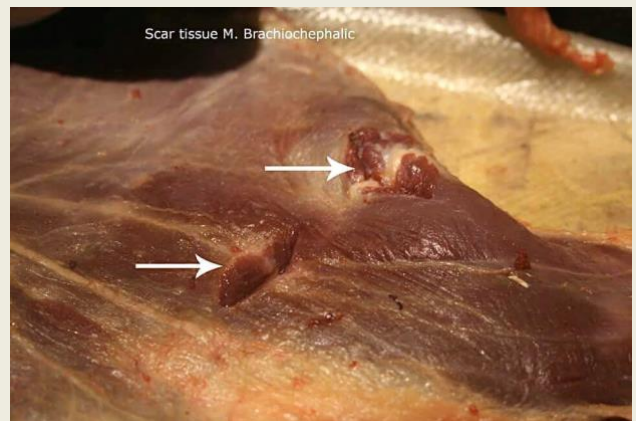
The melanomas were also found on the parotid gland and are very common in white horses.



Furthermore, they found caries in his molars and the facial nerves *Zygomaticus* and *Orbicularis Oris* where smaller than what is usually seen.

NECK

During the assessment of Shafai a **Prophet's Thumbprint** was found. It is usually thought that these small scars are innocent and they won't restrict the horse in anyway.



Upon dissection Shafai showed us differently. It actually went through to the deeper layers of the muscles, causing scar tissue in the muscle itself.

He also showed the **missing Nuchal Ligament Lamellae on C6 and C7**. Furthermore, a hole was present in the lamelle.



Furthermore, as diagnosed while living **he showed arthritis at C2 and also damage on C1 and C2**. Besides that, the *Trapezius Cervicus* was hypertrophied, which indicates a problem

in the front limb from the knee below.

Another special finding was a big scar on his ***Splenius*** muscle. This scar wasn't seen from the outside, which teaches us that not all damage can be seen.

Finally the ***Brachiocephalic*** also showed scar tissue. Also, Trapezius and Brachiocephalic were closer together than normal which restricts movement as they have opposing functions.

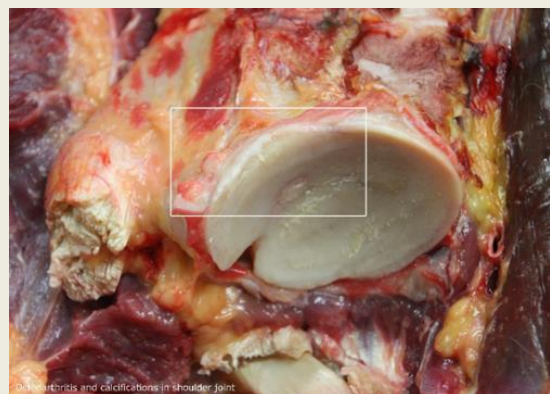


SHOULDER

A strange finding in Shafai's shoulder was a **deformed and broken cartilage of the scapula**. The cartilage had grown with a curvature and looked like it pressed into the muscles. Also two nutrient foramen were visible.



When proceeding it was found that the **shoulder joint was badly damaged** as well. The bone should be white and smooth, but here you can see that it is a bit red and there are indentations visible on the surface of the bone. Inside the joint there were also both calcifications and osteoarthritis present. This would've been painful for Shafai.



Left: Damage and inflammation. Right: Osteoarthritis and calcifications inside the shoulder joint.

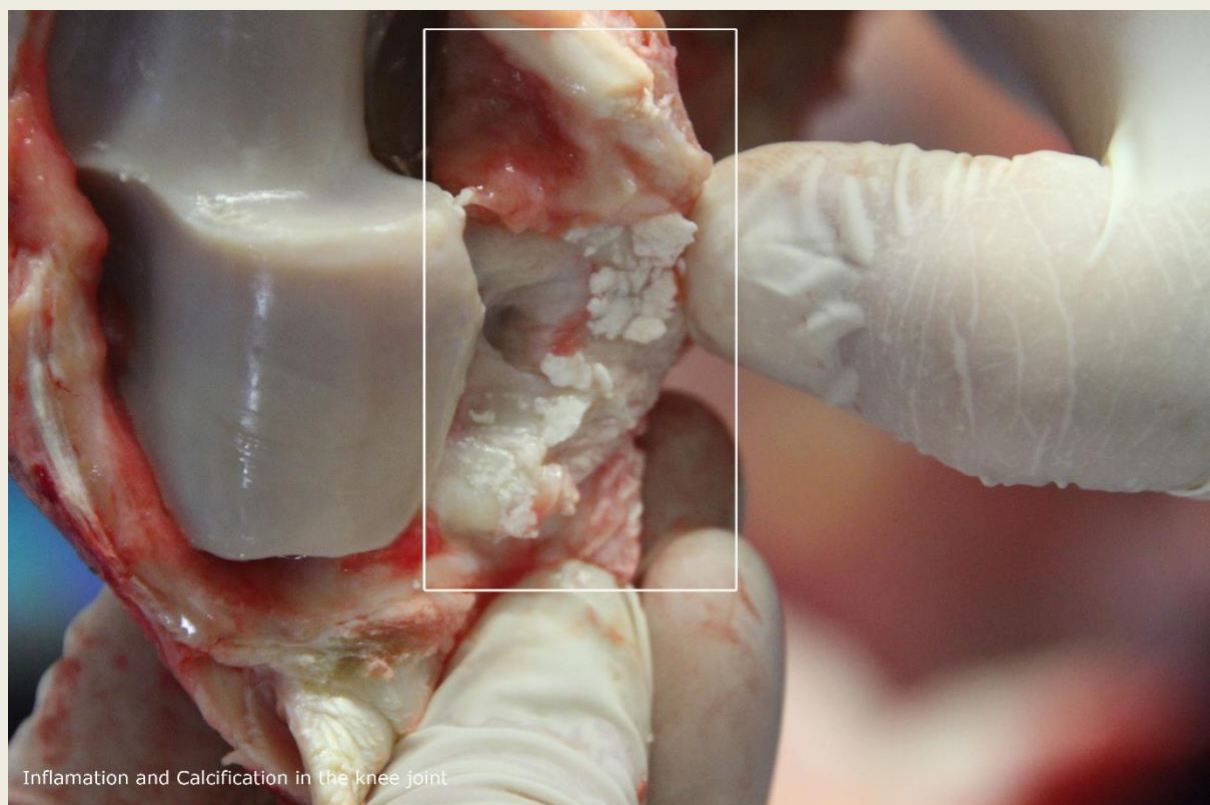
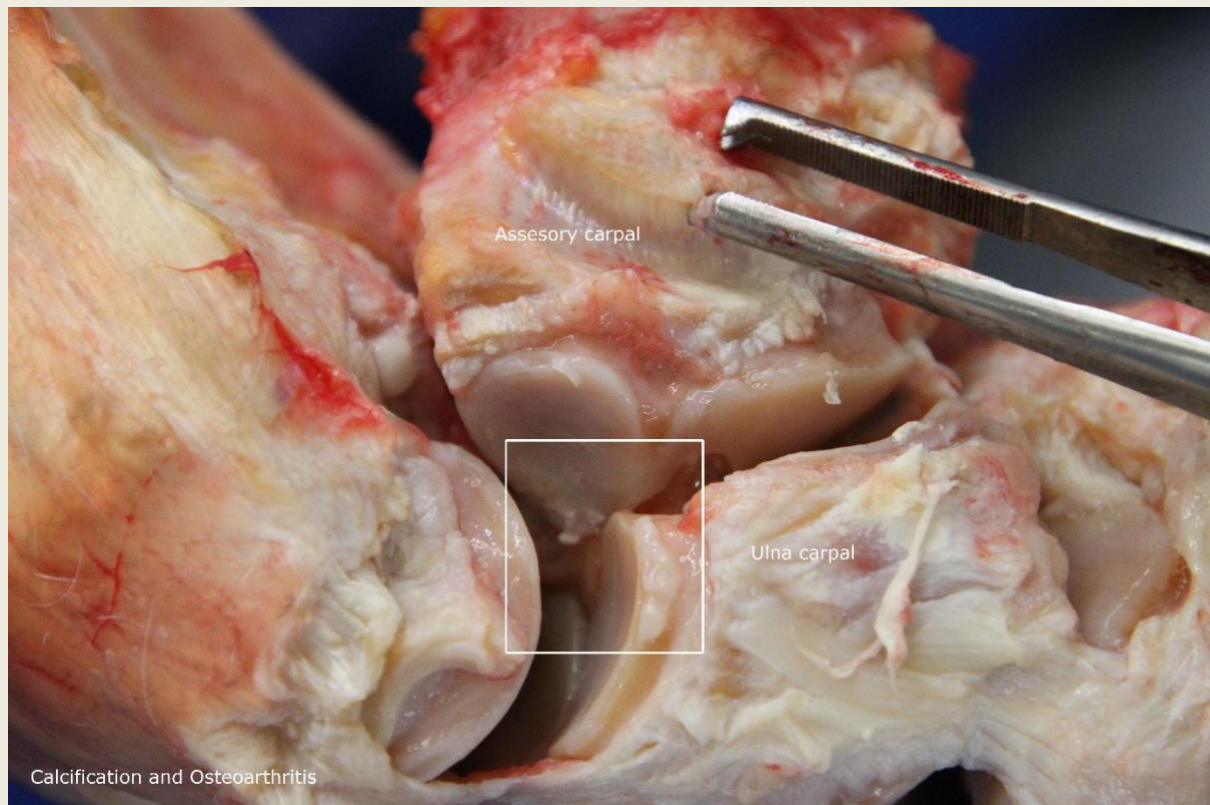
There was **scar tissue visible on Infraspinatus**, no bursitis but a little bit irritated and the synovial fluid was like water. Finally, the **Biceps Brachii** muscle and tendon showed inflammation as well as the **Terres Minor** tendon.

FRONTLEG

From his history we already knew that Shafaï had some issues in the shoulder and forearm. The assessment also told us that there was something wrong in this area. Upon dissection it was found that Shafaï had suffered from a really bad elbow with clear worn out patterns.

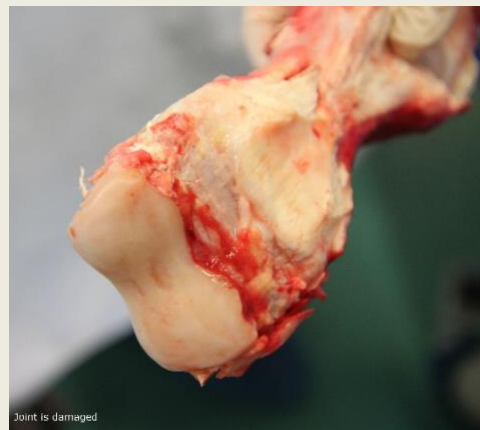
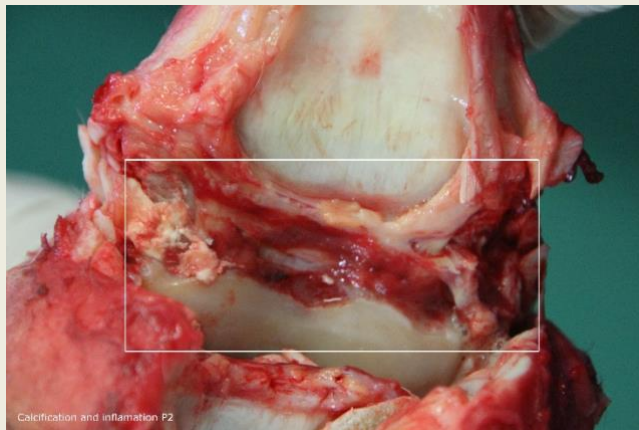


The **arthritis in both his knee and fetlock** were also found. The knee joint was also inflamed, which can be seen from the redness. Around the joint it looked like pre calcifications were present. **Fat was present** between the ligaments/tendons and the knee.



Another interesting finding were **eggs of the botfly on his leg**. The larvae of these flies are known parasites and live in the flesh or inside the gut of their hosts. Naturally, this can cause damage to the horse.

The **phalangeal bones 2 and 3** also showed clear signs of inflammation and calcification.



BACK, BARREL & BELLY

During the dissection it was discovered that Shafaï had **damaged his skin around the girth area**. It was then that Eveline told us that this was caused by usage of the wrong girth. Note that this only happened once, which tells us how sensitive the skin can be.



Shafai was also found to have 17 ribs on both sides and **one floating rib** on the right side of his body. This might be one of the reasons why he had difficulty turning, as this makes it harder to bend.

As felt upon palpation, Shafai had **kissing spines from T15-T16**. Besides that he also had **Spondyloses from T10 – T14**.



Furthermore, he had **asymmetry in the transverse pectorals** and showed a lot of fat between and around the withers.

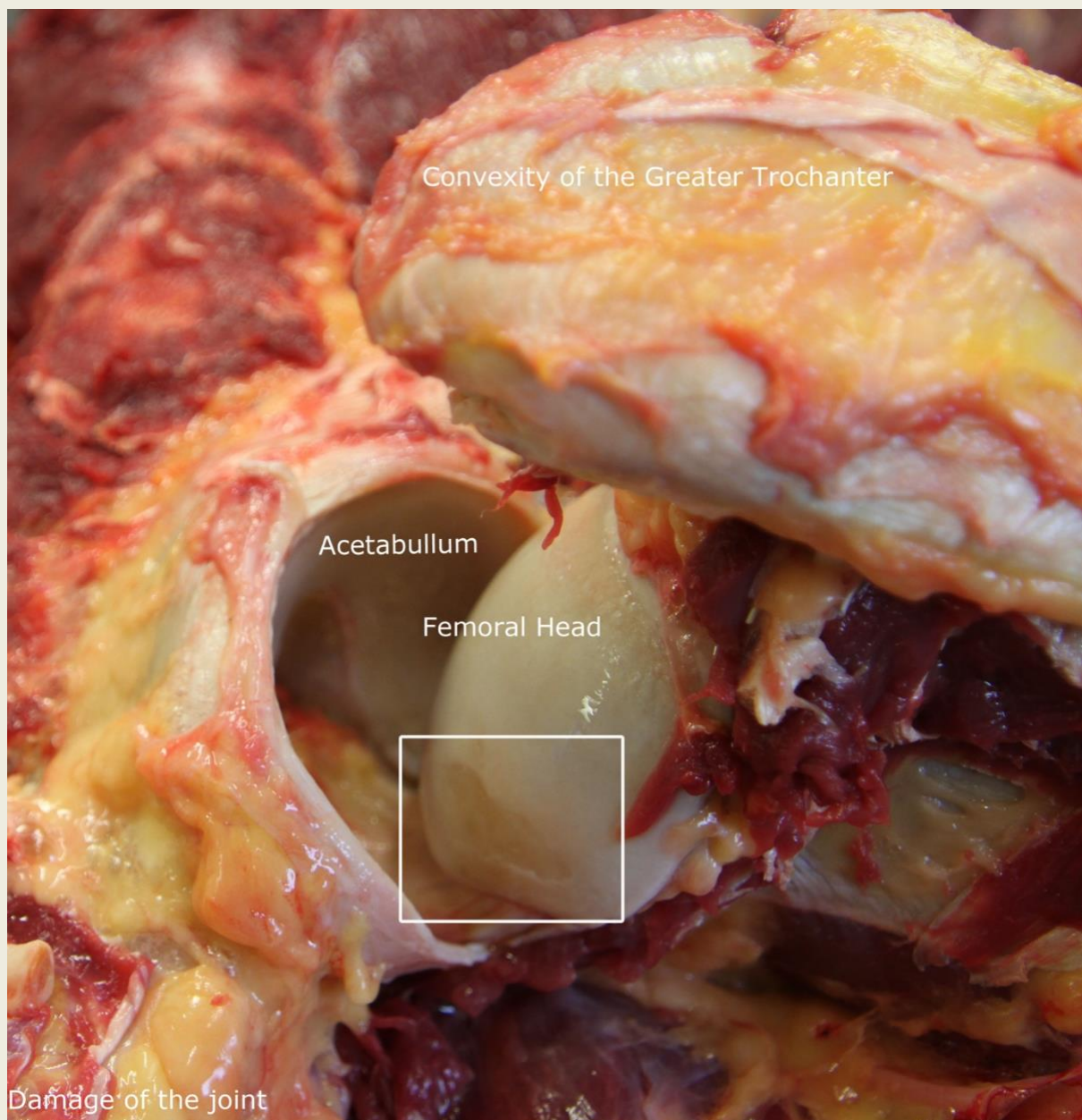
He also had black lymph nodes at the thoracic inlet. Lymph nodes are important for the immune system and getting wastes out of the body. Black lymph nodes suggest the immune system was not optimally functioning and overloading, which makes sense as Shafai was dealing with chronic infection.

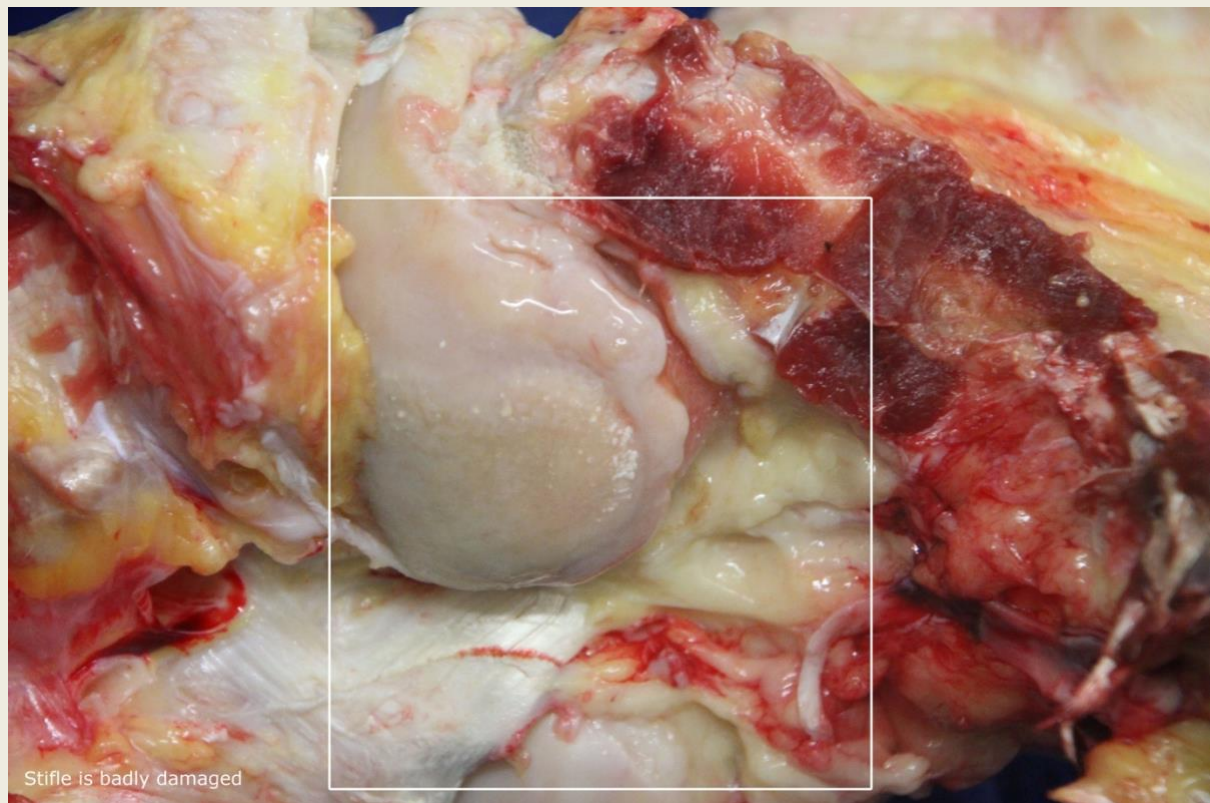
Finally, he showed small melanoma spots under *Latissimus Dorsi*. There was also **scar tissue in the *Latissimus Dorsi* tendon sheet**.

HIND END

We already knew he had a big *scar in the Semitendinosus* muscle.

His stifles were badly damaged, the bone was very weak. **The hip joint** also showed clear worn out patterns and the **hock** on the right hind limb is damaged. Again, this proves there is a strong connection between hip, hock and stifle.





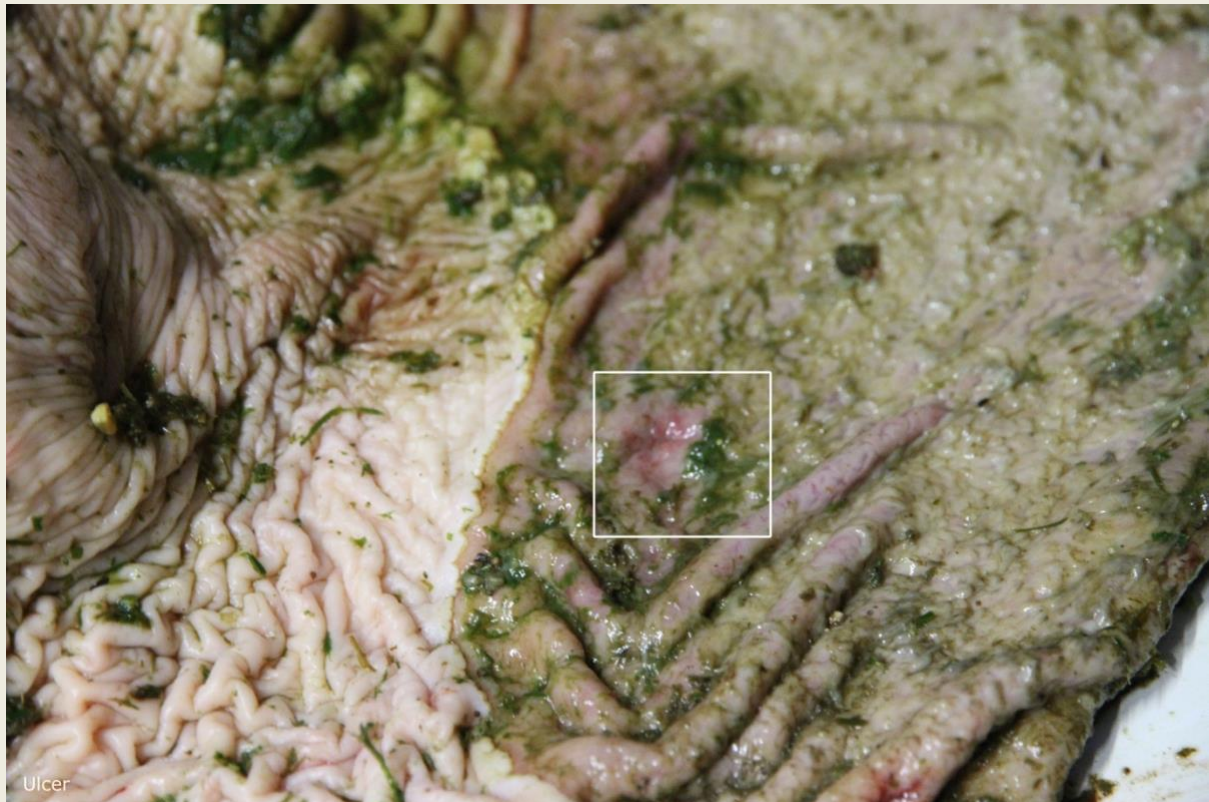
Finally, he also showed **arthritis in this hind limb fetlocks**. The right fetlock was worse than the left.

ORGANS & DIGESTIVE TRACT

During his life, Shafaï suffered from a choke twice. However, this left no visible marks on the oesophagus which was normal.

Most organs were normal, apart from **the liver that showed some scar tissue – which could be caused by parasites - as well as the spleen**. The latter usually heals quickly.

Finally he had a **stomach ulcer**. This could have many reasons, but is very often linked to internal stress. Since there was so much inflammation going on in his body, internal stress is a pretty plausible cause in this case.



CONCLUSION

Thank you for taking the effort to study Shafai's life 'inside-out'. Through his dissection, he unravelled all his secrets and learnt us a lot. This way - and through Eveline's bravery, Shafai can continue to help other horses.

His skeleton will be prepared to find its final resting place at Thirza Hendriks where it will serve as educational material so inspire many students all over the world.

We hope that this case study has inspired and educated you so that Shafai's story will not be forgotten and that together we can help more and more horses in the future!

