



**Adaptos<sup>®</sup>**  
by Biomendex **vet**

Arthrodesis with  
**Adaptos<sup>®</sup>vet**  
bone graft

---

**Biomendex**

# Adaptos<sup>®</sup>vet as bone graft extender in pancarpal arthrodesis

A nine-year-old, 26 kg, mixed breed male dog was fallen from a cliff. In the examination a broad carpal ligament rupture was found, which resulted in carpal arthrodesis. The wrist was operated in general anaesthesia and neural anaesthesia. In the operation the articular surfaces of the carpal bones were reamed and a mix of autologous bone, harvested from the proximal humerus, and 0.5 cc of Adaptos<sup>®</sup>vet 0.5-1.0 mm granules were packed to the joint cavities.

A pancarpal arthrodesis plate was fixed with 2.7 mm and 3.5 mm cortical screws on the anterior surface reaching from the radius to the metacarpal bones. A splint was used for a period of two weeks, in which it was changed twice. After these two weeks, an orthosis was used for a period of two weeks. The splint caused abrasion, which led to wound infection that was healed by focused wound care. The bone healing advanced as planned and expected.

Pre-op



Post-op



Post-op 1 month



Post-op 2 months



“Handling, modification and packing properties similar to natural bone graft makes Adaptos<sup>®</sup>vet unique in terms of usability among bone graft substitute materials.”

---

**Mikael Morelius**

Chief Veterinary Surgeon at Morelius  
Animal Clinic in Sipoo, Finland





# Adaptos<sup>®</sup>vet as bone graft extender in pantarsal arthrodesis

A 5 kg 1.3-year-old coton de tulear had been hit by a car. The patient was observed to have a comminute hock fracture (os talus). The patient was anesthetized as well as epidural before the arthrodesis procedure. The cartilage surfaces of the tarsal bones were reamed and a pantarsal arthrodesis plate was fixed with 1.5 mm and 2.0 mm cortical screws on the anterior surface reaching from the tibia to the metatarsal bones. A bone graft was harvested from the scapula, which was mixed with 0.5 cc of Adaptos<sup>®</sup>vet 0.5-1.0 mm granules.

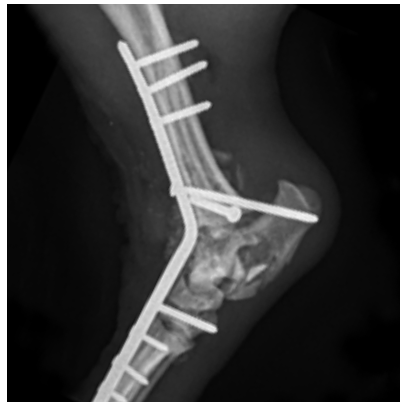
The mixed graft was packed to the fracture site and to the reamed joint cavities to speedup the

bone healing process. A splint was also used as an external support for the first six weeks of healing. The splint was changed weekly based. Despite the weekly monitoring of the splint performance, it caused complications (abrasion and necrosis of the skin), which led to wound care procedures. The plate and the screws were decided to be removed after five months as the bone healing had reached sufficient level and there was suspicion of a biofilm formation due to the infected wounds caused by the abrasion of the splint. In the removal operation there was negative finding of bacteria. In the x-rays taken 5.5 months post op, the bone density was good, and no signs of infection were found.

Pre-op



Post-op



Post-op 1 month




Post-op 2 months



Post-op 5,5 months



A small, fluffy white dog is sitting on a sandy beach. The dog is facing left, looking towards the dunes. Its fur is bright white and appears to be blowing in the wind, especially on its ears and tail. The dog is wearing a black collar with a small orange tag. The background consists of rolling sand dunes with clumps of tall, green grass. The lighting is soft and golden, suggesting late afternoon or early morning. The overall scene is peaceful and natural.

”The material adapts well in the defect contour and the contact to the surrounding bone tissue is good. This is an important feature of a material meant for bone regeneration”

---

**Pauli Keränen**

Chief Veterinary Surgeon

Helsinki University Animal Hospital

## Adaptos®vet

The first truly adaptable bone graft substitute for veterinary use with superior handling qualities and performance.

### Contact us on:

Email: [sales@biomendex.com](mailto:sales@biomendex.com)

Web: [www.biomendexvet.com](http://www.biomendexvet.com)

### Research partners:



HELSINGIN YLIOPISTO  
YLIOPISTOLLINEN  
ELÄINSAIRAALA

**EVIDENSIA**



Shortest  
way to reach  
Adaptos®vet  
products

---

**Biomendex**

Biomendex Oy  
Korkeakoulunkatu 1  
33720 Tampere  
Finland