

## New product developed by Laboratoria Smeets for the treatment of osteoarthritis.

## Clinical case study for the adult dog

Zaiko is a nine-year old Belgian Shepherd and weighs 30 kg. He participated in the World Agility Championship for Belgian Shepherds in 2011. During the 2012 season, he had a lot of problems with his shoulders and back, and he was therefore unable to participate in competitions for a few months. Symptoms were difficulty getting up from a lying position, stiffness, great reluctance to support himself when the hind legs were lifted and impaired amplitude for flexion of the shoulder.

Can Canicart improve the primary clinical symptoms of osteoarthritis, a chronic degenerative disease of the joints?

Canicart contains amino acids (glycine, proline and hydroxyproline) in a form utilizable by the cartilage cells, so the collagen synthesis can take place immediately. The building blocks for cartilage cells have a long way to go before they can be absorbed by the cells. Just below the inner coating (synovial membrane) of the joint capsules lies a loose connective tissue with many capillaries and lymph vessels. The nutrients from the capillaries are released into the synovial fluid in the synovial cavity. Regular joint movements mix the synovial fluid and the nutrients reach the cartilage surface. Diffusion takes place due to the concentration gradients and the nutrients eventually reaches the cartilage cells. Nanometre sized layers of extracellular matrix are built daily, particularly out of the cartilage cells located in the histologically deeper zones. The extracellular matrix transforms into cartilage with the help of the right cofactors. Where there is wear and tear of cartilage, this leads to recovery.

Canicart was administered in the food for two months at 15 g/day or 3 measuring scoops at night. No NSAIDs or other anti-inflammatory drugs were administered from the start.

At the end of this period, the difficulty of getting up from a prone position disappeared completely. The stiffness was also completely reduced. Zaiko is once again much more agile. Where at the start of the study, when lifting the hind legs, he showed a tendency to bite, he now calmly takes it in his stride. The shoulder pain is greatly reduced and the flexion amplitude is normalised.

**Conclusion:** Zaiko has recovered his normal mobility. The parameters where he scored badly upon intake and that were followed closely, all greatly improved. Only Canicart is responsible for the physical recovery, as no NSAIDs or other anti-inflammatory drugs were administered. Canicart is a nutraceutical that is used for maintaining healthy joints and to support flexible movement in the adult dog. Canicart is also used to meet the increased need for nutrients of the musculoskeletal system at high load.

Do you want additional information for similar indications or joint cartilage repair?

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