

# Guidelines for screening and grading of shoulder osteochondrosis (Shoulder Osteochondrosis Guidelines)



Approved by the Board of the Finnish Kennel Club on 6 October 2016.

Amendments by the Board on 21 November 2020 and 19 August 2021. Valid as of 1 January 2022.

*This document is a translation. In cases of doubt, the Finnish version will prevail.*

These guidelines complement the Rules for Combating Hereditary Defects and Diseases (Council 30 November 2008) and the Directives for the Programme for Combating Hereditary Defects and Diseases (PEVISA Guidelines, Board 16 August 2018).

## 1 General provisions

Shoulder osteochondrosis is subject to radiographic/CT screening and shoulder joints are graded to collect data for breeding purposes. The Finnish Kennel Club accepts certificates issued in accordance with these guidelines.

The certificate must be issued in the dog owner's home country or in Finland.

These guidelines must be followed when images are taken of a dog for the purpose of having the images graded by the Finnish Kennel Club. The images and an appropriate referral to radiographic screening are sent to the Finnish Kennel Club, which then issues an official certificate. The official shoulder status of the dog is determined by the inferior shoulder joint.

The dog owner must inform the veterinarian if the dog has been subject to shoulder joint surgery. Information about surgery is recorded on the referral to radiographic screening. Medical records regarding the surgery are attached. A dog operated due to shoulder osteochondrosis is graded as "affected".

If the dog has been subject to an accident (a medical report and radiographs must be attached to the referral), due to which the joint in question cannot be graded, the dog receives the grade "no grading" for that joint. In this case, the dog's result is determined only by the other joint.

Radiographs/ CT images are stored centrally, at a location set by the Finnish Kennel Club, for at least ten years, after which they can be destroyed. However, the Finnish Kennel Club keeps radiographs from the first two weeks of March each year for possible further research purposes.

## 2 Evaluation procedure

The Board of the Finnish Kennel Club appoints the veterinarians authorized to grade radiographs. A scrutineer appointed by the Finnish Kennel Club will learn the dog's breed, age, sex, and registration number.

Only images accompanied by the Finnish Kennel Club's referral, filled out by the veterinarian who has taken the images, can be subject to grading.

Only radiographs/CT images taken of a dog that is identified with an ID number approved by the Finnish Kennel Club can be subject to grading. A dog's ID number must always be verified when images are taken.

A fee is charged for an official certificate. The certificate is sent to the recipient recorded on the referral form. The grading result and the name of the scrutineer are recorded in the Finnish Kennel Club's database.

Information on relevant additional findings found in the images can be recorded in the certificate.

A dog can be radiographed again no earlier than 12 months after the previous imaging. However, if new images are taken for technical reasons, they should be taken as soon as possible. The scrutineer will get access to all previous images of the dog. The grading may change when new images are taken.

Certificates comparable with the grading scale of the Finnish Kennel Club and for which radiographs have been taken in accordance with recommendations set by the Finnish Kennel Club, are approved for imported dogs, foreign stud dogs, and imported semen. The certificate must state that the dog has been identification marked and verified at the time of the examination.

If a certificate issued in accordance with these guidelines is needed for a foreign dog, a dog with an ID number can be radiographed/CT scanned in accordance with these guidelines and images can be submitted to the Finnish Kennel Club for grading (an explanation why a certificate issued in Finland is requested for a foreign dog must be attached).

### 3 Grading scale

- **OC Unaffected** (no signs of osteochondrosis): The caudal humeral head is round in shape with smooth surface.
- **OC Affected** (signs of osteochondrosis): A flattened or radiolucent area on the caudal humeral head.
- **OC Open to interpretation:** Very mild or atypical changes.

### 4 Radiographic procedure

A certificate can be issued for a dog younger than 12 months if signs of osteochondrosis are found in the joint (OC Affected). The grading OC Unaffected cannot be obtained before the age of 12 months.

Radiographs are sent to the Finnish Kennel Club via a submission portal. Radiographs are submitted digitally in DICOM format.

Radiographs must be marked in a way that cannot be altered afterwards (radiographic lead). This also applies to digital radiographs. Mandatory information that must be included in radiographs:

- date
- registration number of the dog (or ID number)
- side marker (internationally recognizable, for instance sin, dex, R, L).

The dog must be under sedation when images are taken, and details of sedative preparations used are recorded on the referral to radiographic screening. Both shoulder joints are radiographed on the same occasion.

Shoulder joints are radiographed in mediolateral projection. The limb subject to imaging is pulled in a cranioventral direction and the limb on top of it in a caudal direction. The cervical spine is positioned dorsally so that its structures do not summate with shoulder joints. The x-ray is focused on the joint space and the image is cropped well. The quality of images must allow the details to be clearly visible. Over and underexposure as well as graininess may prevent the grading of images.

If the images are open to interpretation, additional images in different positions may be requested and, after a certain amount of time, also new images.

### 5 CT scan

A dog can also be CT scanned for an official certificate issued by the Finnish Kennel Club. The scan must be

performed at a clinic approved by the Finnish Kennel Club, in accordance with the method description for CT scans.

A grading can be issued, or a previous grading may be changed based on CT images. Once a dog has been graded on CT images, it may no longer obtain a grading based on radiographs.

## **6 Appeal procedure**

Appeals are processed by an expert panel appointed by the Finnish Kennel Club. An appeal is to be made by the dog owner in writing.

Appeals must be submitted within 90 days from the day when the certificate was posted. The appeal fee is twice the amount of the grading fee. The appeal fee is refunded if the appeal is found justified.

A decision made by the panel replaces the previous grading.

## **7 Exceptions**

In individual cases and for compelling reasons, the Board of the Finnish Kennel Club may issue an exemption from the provisions in these guidelines.