



Finnish Kennel Club's spinal radiography protocol

For LTV and VA grading, the dog must be at least 12 months old when radiographs are taken. For SP and IDD grading, the dog must be at least 24 months old when radiographs are taken.

Images available also: <https://www.kennelliitto.fi/selkaohjeen-kuvat>

Intervertebral disc disease (IDD): Instructions for radiography according to the Finnish Kennel Club protocol

Only breeds listed on [List 1](#) can be graded for IDD by the Finnish Kennel Club.

Anu Lappalainen / 13.6.2015

General instructions:

The dog must be sedated for the radiography and the microchip must be checked.

The radiographs must be marked permanently (e.g. lead tape) with the dog's registration number or microchip number and the date of the radiography. The side marking is mandatory in the ventrodorsal projection.

Radiographs:

In all images the spine must be parallel to the table without rotation of the spine. Use foam rubber supports (Figure 1). **All disc spaces must be clearly visible.**

At least 6 radiographs are needed:

- 1) Lateral cervical spine (**C1-C7**) (Figure 2). The front limbs are pulled back. Centering in the mid cervical spine.
- 2) Lateral cervico-thoracic junction (Figure 3). Centering int the C-T junction.
- 3) Lateral thoracic spine = **C7 – L1** covered preferably in one image (Figure 4).
- 4) Lateral thoracic-lumbar junction (Figure 5). Centering int the T-L junction.
- 5) Lateral lumbar spine = **T13 – Cd1** covered preferably in one image (Figure 6). If this is not possible, two radiographs are made (T13 – L7 and L5 – Cd 1). The cranial border of the iliac bones can be used as a land mark for identification of the vertebrae.
- 6) Ventrodorsal projection of the sacrum and at least 2 most caudal lumbar vertebrae (Figure 7A). Hip radiograph (Figure 7B) can be used if the caudal lumbar vertebrae are visible.



Figure 1 Positioning

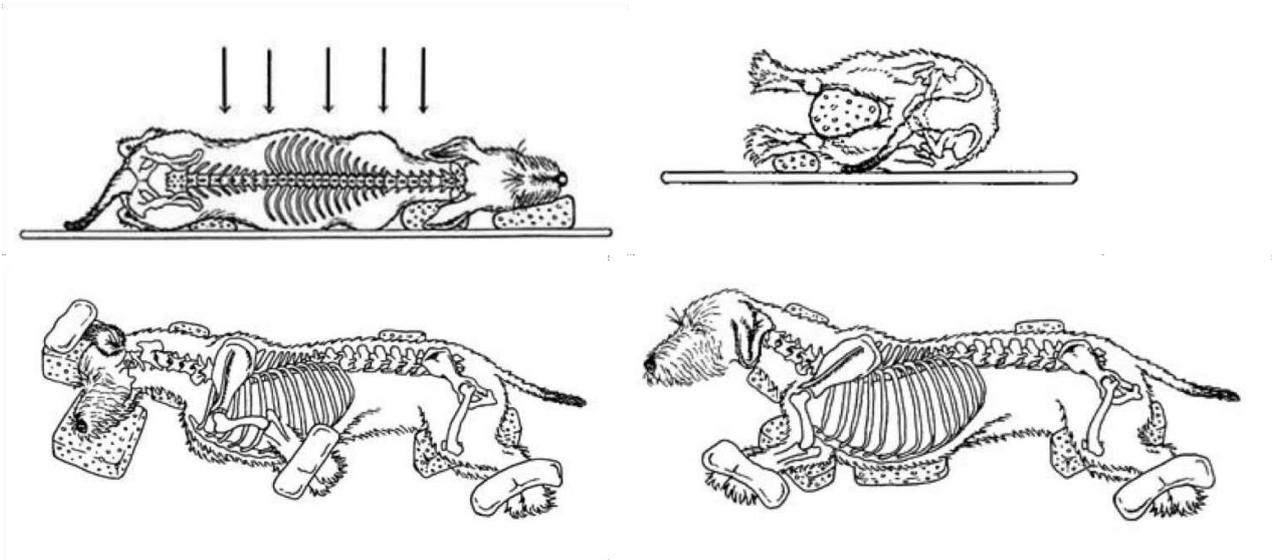


Figure 2 Cervical spine

Figure 3 C-T junction

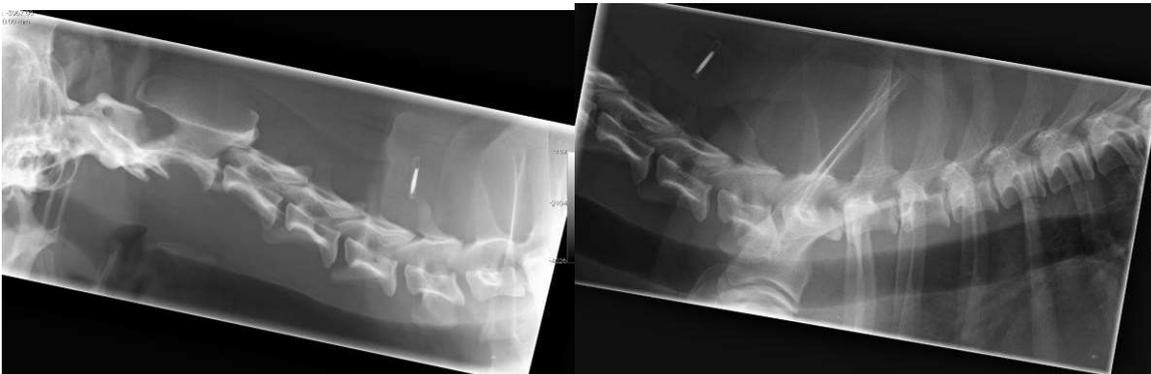


Figure 4 Thoracic spine

Figure 5 T – L junction

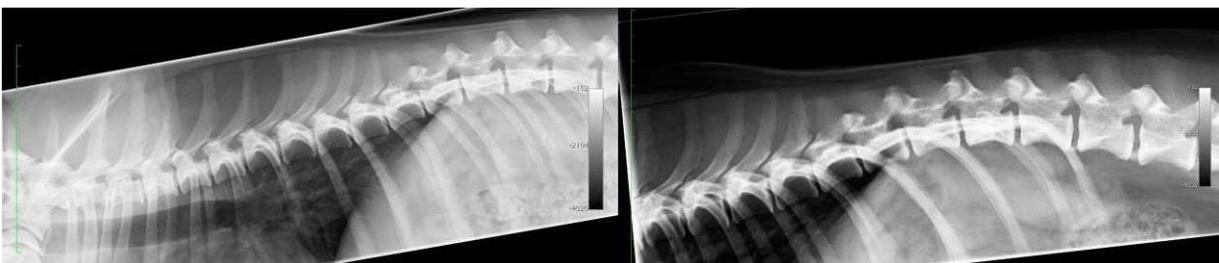




Figure 6 Lumbar spine

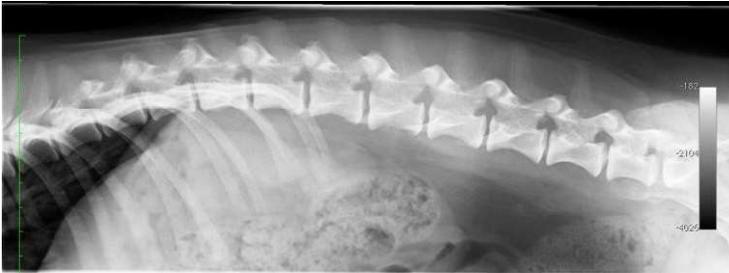


Figure 7A Sacrum VD

Figure 7B Hips





Lumbosacral transitional vertebra (LTV) and spondylosis: Instructions for radiography according to the Finnish Kennel Club protocol

Anu Lappalainen / 30.11.2014

General instructions:

The dog must be sedated for the radiography and the microchip must be checked.

The radiographs must be marked permanently (e.g. lead tape) with the dog's registration number or microchip number and the date of the radiography. The side marking is mandatory in the ventrodorsal projection.

Radiographs:

For identification of the LTV type, information of the exact number of thoracic and lumbar vertebrae is essential.

At least 3 radiographs are needed:

- 1) Lateral thoracic spine
= **C7–L1** covered preferably in one image (Figure 1). If this is not possible, two radiographs are made (C7–T11 and T10–L1 [Figure 4]). The anticlinal vertebra (T10 or T11) can be used as a landmark for identification of the vertebrae.
- 2) Lateral lumbar spine
= **T13–Cd1** covered preferably in one image (Figure 2). If this is not possible, two radiographs are made (T13–L7 and L5–Cd 1). The cranial border of the iliac bones can be used as a land mark for identification of the vertebrae.
- 3) Ventrodorsal projection of the sacrum and at least 2 most caudal lumbar vertebrae (Figure 3A). Hip radiograph (Figure 3B) can be used, if the caudal lumbar vertebrae are visible.

The radiographs should be straight: the spine parallel to the table and without rotation (use foam rubber supports).

Figure 1 Thoracic spine





Figure 2 Lumbar spine



Figure 3A Sacrum VD





Figure 3B Hips



Figure 4 T-L junction





Vertebral Anomaly (VA): Instructions for radiography according to the Finnish Kennel Club protocol

Anu Lappalainen / 31.1.2024

The same protocol is followed as in the previous section (Lumbosacral transitional vertebra (LTV) and spondylosis). **In addition to radiographs listed in the previous section**, an additional radiograph is required of the cervical spine. If the breed is listed on [List 2](#), ventrodorsal projections of the thoracic and lumbar spine are also needed.

Lumbosacral transitional vertebra (LTV) (and spondylosis, if the dog is at least 24 months of age) can be graded from these same radiographs.

Radiographs:

At least 4 radiographs are needed:

- 1) Lateral cervical spine (**C1–C7**) (Figure 1). The front limbs are pulled back. Centering in the mid cervical spine.
- 2) Lateral thoracic spine, **see previous section for Lumbosacral transitional vertebra (LTV) and spondylosis**
- 3) Lateral lumbar spine, **see previous section for Lumbosacral transitional vertebra (LTV) and spondylosis**
- 4) Ventrodorsal projection of the sacrum and at least 2 most caudal lumbar vertebrae, **see previous section for Lumbosacral transitional vertebra (LTV) and spondylosis**

In addition, if the breed in question is listed on [List 2](#), on more radiograph in addition to those listed above is needed:

- 5) Ventrodorsal projection of thoracic spine (**C7–L1**)
- 6) Ventrodorsal projection of lumbar spine (T13-sacrum)

The radiographs should be straight: the spine parallel to the table and without rotation (use foam rubber supports).

Figure 1 Cervical spine

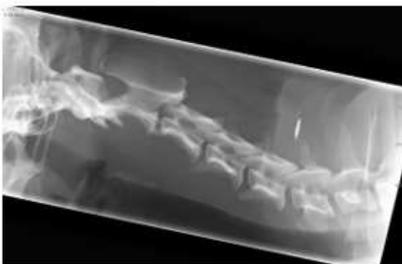


Figure 5 Thoracic spine VD



Figure 6 Lumbar spine VD