Shoulder Radiograph: Lateral View

A routine should exam consists of a lateral and caudocranial view. When performing shoulder radiographs, a quality control check system is performed. The guidelines for this check are listed here for review. If your answer is yes to all of questions below, have your doctor review the images and then send them to AIS for evaluation. If you answer is no, review the material to help you obtain a diagnostic quality radiograph.

### 1. Check the anatomical boundaries

<table>
<thead>
<tr>
<th>Lateral</th>
<th>Anatomy Boundaries Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Lateral View" /></td>
<td>The shoulder joint and a small portion of the distal scapula and a small portion of the proximal humerus are needed for all views. The area just proximal and distal to the shoulder joint should be included.</td>
</tr>
</tbody>
</table>

### 2. Is the patient straight? Is the positioning appropriate?

<table>
<thead>
<tr>
<th>Checklist</th>
</tr>
</thead>
<tbody>
<tr>
<td>✅ Patient right side (affected limb) down</td>
</tr>
<tr>
<td>✅ Keep patient in lateral position</td>
</tr>
<tr>
<td>✅ Pull the top limb toward the hind toes</td>
</tr>
<tr>
<td>✅ Traction on the down limb to pull the shoulder to the sternum</td>
</tr>
<tr>
<td>✅ Head dorsally</td>
</tr>
<tr>
<td>✅ Positioning devices can be used</td>
</tr>
<tr>
<td>✅ Collimate to landmarks</td>
</tr>
<tr>
<td>✅ Verify positioning</td>
</tr>
</tbody>
</table>

![Patient Positioning](image2.png)
3. **Is the technique appropriate? Is the background black? Can you see the needed anatomy including soft tissues?**

<table>
<thead>
<tr>
<th>Lateral</th>
<th>Anatomy Needed</th>
</tr>
</thead>
</table>
| ![Lateral Image](image) | • The humerus (humeral head, greater tubercle, bicipital groove)  
• Scapula  
• The shoulder joint should not be superimposed with the trachea |

4. **Is there a positioning marker present? Is it on the correct side of the patient, not obscuring anatomy and legible? Is the patient ID information correct on the image or file?**

5. **Do you have all of the necessary views? Lateral and caudocranial**

### Quick Tips

1. Plates or cassettes can be “split” so that a comparative of the right and left shoulder or multiple views of the same shoulder can be obtained. If this technique is used, the proximal and distal orientation of the limb should be the same for both views.
2. If the patient is sedated/anesthetized, note type of sedation on the radiology form.
3. Be sure to decrease the collimator size to only include the shoulder joint and a small portion (approximately ¼) of the distal scapula and a small portion (approximately ¼) of the proximal humerus.
4. The limb is rotated internally (paw down) for a pronated lateral. This view is used to check for osteochondrosis.
5. The limb is rotated externally (paw up) for a supinated lateral. This view is used to check for osteochondrosis.
6. Use of patient positioning devices is recommended to keep patient in the proper position. Some examples include foam wedges, sandbags and ties.
7. A wooden spoon can be used to help move excess skin out of the collimated view.
8. Wear your personal protective equipment appropriately and distance yourself from the primary beam.
9. Once reviewed, submit the study to AIS immediately to expedite interpretation and communication of results.
10. Appreciate your patient.
Shoulder Radiograph: Caudocranial (CdCr) View

When performing shoulder radiographs, a quality control check system is performed. The guidelines for this check are listed here for review. If your answer is yes to all of questions below, have your doctor review the images and then send them to AIS for evaluation. If you answer is no, review the material to help you obtain a diagnostic quality radiograph.

### 1. Check the anatomical boundaries

<table>
<thead>
<tr>
<th>Caudocranial</th>
<th>Anatomy Boundaries Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td>Center x-ray beam on joint space/proximal humerus. The area just proximal and distal to the shoulder joint should be included.</td>
</tr>
</tbody>
</table>

### 2. Is the patient straight? Is the positioning appropriate?

**Checklist**
- ✓ Sedation needed
- ✓ Patient on back
- ✓ Thoracic limb cranially and pelvic limb caudally
- ✓ Affected limb slight abducted (away from the midline)
- ✓ Long axis of the scapula and humerus are parallel to each other
- ✓ Do not use extreme traction
- ✓ Positioning devices can be used
- ✓ Collimate to landmarks
- ✓ Verify positioning

![Image](image2.png)
3. Is the technique appropriate? Is the background black? Can you see the needed anatomy including soft tissues?

<table>
<thead>
<tr>
<th>Caudocranial</th>
<th>Anatomy Needed</th>
</tr>
</thead>
</table>
| ![Image](image.png) | • The humerus (humeral head, greater tubercle, bicipital groove)  
• Scapula  
• The humerus and scapula should be aligned and parallel to the x-ray table |

4. Is there a positioning marker present? Is it on the correct side of the patient, not obscuring anatomy and legible? Is the patient ID information correct on the image or file?

5. Do you have all of the necessary views? Lateral and caudocranial

Quick Tips

1. Plates or cassettes can be “split” so that a comparative of the right and left shoulder or multiple views of the same shoulder can be obtained. If this technique is used, the proximal and distal orientation of the limb should be the same for both views.
2. Do not center beam over both legs and submit one exposure.
3. If the patient is sedated/anesthetized, note type of sedation on the radiology form.
4. The thorax can be slightly rotated but the limb must be straight and in alignment.
5. Positioning for this view is similar to the positioning of the VD thorax but the collimation is over the shoulder instead of the chest.
6. Use of patient positioning devices is recommended to keep patient in the proper position. Some examples include foam wedges, sandbags and ties.
7. Wear your personal protective equipment appropriately and distance yourself from the primary beam.
8. Once reviewed, submit the study to AIS immediately to expedite interpretation and communication of results.