



Medial Shoulder Luxation in Dogs and Cats

Quick Take

A medial shoulder luxation occurs when the **ball of the shoulder joint (humeral head) slips inward (toward the chest) out of its normal position in the socket** (glenoid cavity).

- It is the most common form of shoulder luxation in dogs and cats.
- Usually caused by trauma
- Can also result from congenital ligament laxity
- Causes sudden severe pain and lameness

While **early cases** may respond to closed reduction, **surgery is the gold standard for reliable long-term stability**

When the **condition becomes chronic, arthritic, or repeatedly unstable**, shoulder arthrodesis (joint fusion) becomes a **critical salvage option** for pain relief and limb function.

1) What's Going On Inside?

The shoulder relies heavily on **soft-tissue stabilizers**, not deep bone structure.

In medial luxation:

- The **glenomedial humeral ligament** ruptures
- The joint capsule tears
- The humeral head displaces inward

Abnormal motion produces:

- Inflammation
- Cartilage wear
- Progressive pain
- Degenerative arthritis

If untreated or repeatedly unstable:

- The joint develops:
- Severe osteoarthritis
- Cartilage erosion
- Bone remodelling

At this stage, **restorative stabilization** is no longer sufficient
This is **where arthrodesis becomes necessary**.

2) Clinical Signs

- Non-weight-bearing lameness
- Paw rotated outward
- Pain on shoulder manipulation
- Crying, trembling
- Muscle atrophy in chronic cases
- **Cats often refuse to jump entirely**



3) Diagnosis

- Orthopaedic exam
- X-rays (confirm luxation & arthritis)
- CT/MRI for chronic cartilage damage

4) Treatment Overview

Strategy	Indicated for
Closed reduction	Very fresh first-time luxation
Capsulorrhaphy	Acute mild instability
Prosthetic ligament reconstruction	Primary surgical stabiliser (most cases)
Biceps transposition	Select chronic cases
Glenoid augmentation	Rare
Shoulder arthrodesis	End-stage degeneration, arthritis, failed repairs

5) Surgical Stabilisation Options

Prosthetic Glenohumeral Ligament Reconstruction

(Primary Recommended Repair)
Synthetic fibre recreates medial ligament
85–95% success
Preserves joint motion
Best for:
Acute cases
Young animals
Active dogs and cats

Capsulorrhaphy

Tightens joint capsule
Often adjunctive
70–85% success in early cases

Biceps Tendon Transposition

Used when capsule is destroyed
More invasive
Moderate success

SHOULDER ARTHRODESIS: definitive Salvage Procedure for Chronic & Arthritic Luxations

6) What Is Shoulder Arthrodesis?

Shoulder arthrodesis = **permanent surgical fusion** of the shoulder joint.

The goal:

- Eliminate motion
- Eliminate pain
- Create a solid, stable, weight-bearing limb



This is NOT used for acute luxations.

It is reserved for:

- End-stage arthritis
- Chronic luxation > 4–6 weeks
- Failed stabilization surgeries
- Severe cartilage destruction
- Severe neurologic shoulder instability
- Congenital deformity with pain
- Neoplasia after tumor resection

7) How Arthrodesis Works

All remaining cartilage is surgically removed

The humerus and scapula are positioned at an ideal walking angle

Bones are rigidly fixed with plates and screws

Over 8–12 weeks, the bones fuse into one structure

Result:

- **No more joint movement**
- **No more luxation**
- **No more arthritic friction**
- Permanent mechanical stability

8) What Movement Will My Pet Lose?

Because the **shoulder joint no longer moves**:

- The elbow and wrist fully compensate
- The limb still swings forward normally
- Running, walking, climbing, and jumping are all still possible
- Pets do not walk stiffly once adapted.

9) Outcomes & Prognosis After Arthrodesis

Outcome	Rate
Pain-free weight-bearing function	85–95%
Return to walking/running	Very high
Ability to jump	Good in cats & small dogs
Athletic function	Moderate–Good
Long-term limb function	Excellent

- Most pets become completely pain-free
- Chronic luxation and arthritis are permanently eliminated
- Quality of life dramatically improves



10) Complications of Shoulder Arthrodesis

Complication	Rate	Notes
Implant loosening	5–15%	Strict confinement critica
Delayed bone fusion	5–10%	Higher in revision cases
Fracture below fusion	<5%	Rare
Limb shortening	Expected	Usually cosmetic
Permanent loss of shoulder motion	100%	Intended outcome

Failure almost always results from early uncontrolled activity.

11) Arthrodesis vs Ligament Reconstruction

Ligament Repair

Preserves motion but carries a risk of relaxation of 5-15%

Arthrodesis

Good for arthritis as pain is eliminated

Best for chronic cases

Other joints on the same limb should be free of arthritic changes as they will need to compensate

Risk of relaxation - 0%

Recovery time is similar with both techniques **8–12 weeks**

Final limb function is excellent with ligament repair whenever the patient matches the selection criteria and is very good with arthrodesis once fusion is achieved.

12) Recovery After Arthrodesis

8–10 weeks strict confinement

Leash-only mobility

Sling support initially

No running or jumping until fusion confirmed

Follow-up X-rays at:

4 weeks

8–10 weeks

Physical therapy begins after fusion confirmed

By 3–4 months:

Most pets walk normally

Pain-free limb use

13) When Should Arthrodesis Be Chosen?

- A. Chronic luxation > 1 month
- B. Failed prosthetic ligament repair
- C. Severe shoulder arthritis

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- D. Repeated re-luxation
- E. Neurologic instability
- F. Malformed joint anatomy
- G. Tumor resection cases
- H. Working dogs needing guaranteed stability without arthritis pain

