

JAW FRACTURE REPAIR DISCHARGE INSTRUCTIONS

WIRE AND INTRAORAL COLD COMPOSITE FIXATION

Your pet's jaw fracture was stabilized using surgical wire placed around the teeth and intraoral acrylic composite material applied inside the mouth to hold the fracture segments in place. This is a less invasive repair that relies on the wire and composite splint to keep the bone stable while it heals over 6-8 weeks.

What to Expect in Your Pet's Mouth

- **Metal wire** may be visible along the gum line or between teeth under the composite
 - **Composite material** covering several teeth on the upper or lower jaw—this is the composite splint
 - **Wire loops or twists** near the gumline next to the teeth
 - **Mild swelling** of the gums and lips for 7-10 days
 - **Drooling**, often blood-tinged for 24-48 hours
 - **Difficulty closing the mouth completely** until swelling resolves
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How to Check the Surgery Site

1. **Lift the lip gently** to view the wire and composite
 2. Look for:
 - **Composite still firmly attached** to teeth (should not wiggle or shift)
 - **Composite still intact as one piece** (there should not be any cracks in the composite)
 - **Wire intact** without breaks or loose ends poking out
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Complications Specific to Wire/Composite Repair

- **Wire Breakage or Loosening**
 - Wire snaps from chewing forces or stress on fracture

- Wire ends poke through gums, cheeks, or tongue
- Fracture becomes unstable, pain returns, jaw shifts out of position
- **What to look for:** Visible gap in wire, wire end poking into lip or tongue, clicking or grinding sound when pet tries to chew, blood on wire or composite, wire tip visible outside expected area, pet pawing at face, refusal to open mouth, bad odor from infection at wire site
- **Composite Splint Failure**
 - Acrylic material cracks, chips, or detaches from teeth
 - Teeth become loose within the splint
 - **What to look for:** Cracks on the splint, pieces of white material in food or bedding, exposed teeth that were previously covered, sharp edges in mouth, splint moves when touched gently
- **Tooth Devitalization**
 - Teeth within the splint may die due to tooth fracture during the trauma exposing pulp cavity, and pulp death after the composite splint is placed on these teeth.
 - **What to look for:** Discolored (gray, purple, or tan) teeth under composite, swelling at tooth root visible as bump on jaw or under eye, draining tract with pus on face or gums
- **Fracture Non-Union or Delayed Union**
 - Bone fails to heal due to instability, infection, or poor blood supply
 - **What to look for:** Persistent pain when jaw is touched weeks after surgery, abnormal movement at fracture site, malocclusion (teeth not meeting properly) that worsens over time, swelling that returns after initial improvement
- **Osteomyelitis (Bone Infection)**
 - Infection at fracture site from bacteria entering through gums or around wire
 - **What to look for:** Foul odor from mouth, thick yellow-green discharge around wire or from under composite, fever, lethargy, swelling that is warm and painful, exposed bone visible if gums recede
- **Malocclusion from Wire Tightening**
 - Wire placed too tightly or shifts, pulling jaw into wrong position

- **What to look for:** Lower jaw shifted to one side, upper and lower teeth not meeting normally, difficulty closing mouth, teeth hitting each other incorrectly causing pain and reluctance to eat
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Emergency Signs — Call Immediately

- Wire completely breaks or comes out
 - Composite splint breaks or falls off
 - Sudden severe bleeding from mouth
 - Jaw hanging open and cannot close
 - Rapidly increasing facial swelling (especially under eye or along jawline)
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GENERAL NOTES

Healing Time: Jaw fractures typically take 6-8 weeks to heal, but may require 12 weeks in older animals, diabetics, or those with poor nutrition.

Follow-up Radiographs: Essential at 6-8 weeks to confirm bone healing before allowing normal activity or chew toys.

Hardware Removal: Wire and composite are always removed after healing. Plates and screws may remain unless causing problems, though removal requires second surgery.

Permanent Changes: Some malocclusion or slight jaw asymmetry may persist even after successful healing—this is usually cosmetic and does not affect function.