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HOW DO I TREAT HIP DISLOCATION?

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INTRODUCTION

Dislocation of the hip joint is a common injury in dogs and cats, usually caused by high-energy trauma. The hip joint offers good stability thanks to the deep acetabulum, the joint capsule, the ligaments and the negative intra-articular pressure. When these structures are broken, dislocation occurs, with craniodorsal dislocation being the most common.

The therapeutic goal is to restore joint congruency, prevent recurrence and preserve locomotor function. To this end, I have developed a comprehensive approach that combines three techniques: ileofemoral suture (transarticular extracapsular), capsular repair and stabilisation with a toggle pin or rod. Depending on the injury presented by each patient, I individually select the most appropriate technique or combination.

INITIAL DECISION

After confirming the dislocation through clinical examination and orthogonal X-rays, we assess whether closed reduction is feasible: only when it occurs within the first 48 to 72 hours and without acetabular fracture. Given its high recurrence rate (up to 50% in some reports) and if there is suspicion of capsule damage, or the patient is large or highly active, I opt for direct surgery.

This first stage of assessment is critical to avoid ineffective treatments. If the animal presents with severe pain, crepitus, or instability during the orthopaedic examination, the suspicion of capsular or ligament damage increases. In these cases, even if the dislocation is not recent, closed reduction is ruled out due to the high risk of early failure.

The size of the patient also influences the decision: large, active dogs tend to put more stress on the joint, which increases the risk of recurrence if it is not surgically reinforced. Conversely, in small, quiet patients with no other orthopaedic injuries, a controlled trial of closed reduction under deep sedation or general anaesthesia, with subsequent radiographic control, may be considered.



However, if during manipulation under anaesthesia, frank instability or persistent subluxation is detected after reduction, the conservative attempt is discontinued. Likewise, any radiographic sign of acetabular fracture or irregular joint space in the acetabulum justifies direct progression to surgery, as closed reduction would be unfeasible or counterproductive.

In cats, the success rate of closed reduction may be somewhat higher due to their lower weight and muscle tone. However, concomitant injuries such as pelvic or femur fractures are also common, requiring a combined surgical approach. A complete radiographic evaluation of the traumatised patient is essential before deciding on the therapeutic approach.

In addition, factors such as neurological status, the presence of neuropathic pain or signs of sciatic nerve avulsion must be taken into account, as these may contraindicate certain surgical techniques. The final decision should be based not only on the technical feasibility of closed reduction, but also on the patient's medium- and long-term functional prognosis.

Therefore, in cases of diagnostic uncertainty, suspected intra-articular injury, or minimal evidence of post-reduction instability, I prefer to opt for open surgery and direct repair, combining techniques according to the characteristics of the dislocation and the patient.

STABILISATION STRATEGIES

In my practice, I combine the three techniques mentioned above according to the individual presentation:

1. Iliofemoral suture or extracapsular technique
In dislocations without acetabular damage and with a reparable capsule, I use a non-absorbable suture to attach the greater trochanter to the iliac wing, either alone or in combination with other techniques.
2. Joint capsulorrhaphy
In cases with viable capsular tissue, I carefully close the joint capsule to complement the extracapsular suture and restore containment. This is ideal in young patients and in recent dislocations. Combining this with iliofemoral suture provides additional stability without compromising excess mobility.
3. Toggle pin
This technique provides the most stability. It is the most commonly used technique in my hospital to stabilise hip dislocations. It is ideal for chronic dislocations, recurrent dislocations, or severely damaged capsules. For patients with high exercise requirements, I prefer to use the toggle pin.

COMBINED MANAGEMENT

My usual protocol is:

- Attempt closed reduction only in very early cases without associated fracture.



- In open surgery, assess the capsule; if it is almost intact or repairable, perform capsulorrhaphy together with a toggle pin or ileofemoral suture.
- If there is obvious instability, opt for the toggle pin as the main technique.
- In complex cases, combine toggle pin with ileofemoral suture and capsular repair to restore multiple support structures.

This personalised approach has improved the success rate at our centre, even in very active patients, larger patients, or patients with complex dislocations.

POSTOPERATIVE CARE

Post-surgical management is key:

- Controlled rest for 4 to 6 weeks, with total activity restriction.
- Multimodal analgesia, including anti-inflammatories and opioids if necessary.
- Passive and progressive physiotherapy to prevent stiffness and promote functional recovery.
- Follow-up X-rays to confirm the position of the femoral head, the integrity of the implant and the evolution of the joint.

Early detection of loosening or complications allows for minor adjustments or interventions, avoiding rescue treatments such as femoral head excision.

ILLUSTRATIVE CASES

During the presentation, representative clinical cases reflecting these strategies will be shown:

CONCLUSIONS

Hip dislocation in dogs and cats can be successfully managed by selecting the appropriate surgical technique according to the characteristics of each patient. The combined use of the three techniques—ileofemoral suture, capsulorrhaphy, and toggle pin—allows adaptation to the type of injury, age, and size of the animal, maximising the possibility of success and long-term function.

This comprehensive clinical approach, supported by recent literature, offers stable and satisfactory results, minimising complications and improving the quality of life of patients.

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