

# Pelvic Fractures in Cats

**Armi Pigott, DVM, DACVECC**

*Lakeshore Veterinary Specialists*

*Glendale, Wisconsin*

## In the Literature

Gant P, Asztalos I, Kulendra E, Lee K, Humm K. Retrospective evaluation of factors influencing transfusion requirements and outcome in cats with pelvic injury (2009-2014): 122 cases. *J Vet Emerg Crit Care (San Antonio)*. 2019;29(4):407-412.

## FROM THE PAGE ...

The pelvis is the second most common fracture site in cats, with ≈25% of all reported fractures occurring in the pelvis.<sup>1-3</sup> The most common causes include falls from a tall height and vehicular trauma.<sup>2</sup> Concurrent extra-pelvic injuries are also reported in 58% to 72% of cats with traumatic pelvic fractures, as large impact forces tend to be involved with these injuries.<sup>2,4</sup>

In humans with traumatic pelvic fractures, the mortality rate is 5% to 50%,<sup>5</sup> depending on overall severity of injury; ≈33% of patients with traumatic pelvic fractures require blood transfusion as part of resuscitation.<sup>6</sup> Most occurrences of hemorrhage in humans are believed to stem from concurrent injuries, not from fractured bone.<sup>5-8</sup>

The need for transfusion and hemorrhage-control interventions in humans can be predicted by the pattern of pelvic fractures, the presence of shock on admission, and the Injury Severity Score.<sup>9,10</sup> This retrospective study evaluated whether characterization of transfusion requirements and outcomes could be similarly predicted in cats presented with traumatic pelvic fractures. Of the 112 cats included in the study, 21 received a blood transfusion, 84 required surgical fracture stabilization, 25 required surgery for other injuries (ie, skin wounds, urinary tract trauma, ocular trauma), and 102 (91.1%) survived to discharge. Only half of the cats requiring a transfusion needed it preoperatively, and none received the transfusion as part of initial resuscitation.

Cats with sacroiliac luxation or pubic fractures were more likely to receive blood transfusions; however, these fractures were also the most common, so further evaluation in a different population of cats is needed to determine if these fracture types can truly predict the need for transfusion. Of note, 8% of cats in this study required surgery to repair disruption of the urinary tract, a rate much higher than previously reported in either dogs or cats.<sup>2,7,8</sup>

## ... TO YOUR PATIENTS

Key pearls to put into practice:

- 1** Approximately 1 in 5 cats with pelvic fractures may require a blood transfusion during hospitalization.
- 2** Because cats with traumatic pelvic fractures often have additional injuries, any cat with a pelvic fracture should have a thorough, whole-body-systems evaluation.
- 3** Urinary tract injury may be more common in cats with traumatic pelvic fracture than previously thought. Contrast cystourethrogram and/or serial ultrasonography may be helpful for early identification of cats requiring intervention for this problem.

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**Approximately 1 in 5 cats with pelvic fractures may require a blood transfusion during hospitalization.**

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