Feline External Fixators

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In the Literature

Beever L, Giles K, Meeson R. Postoperative complications associated with external skeletal fixators in cats. *J Feline Med Surg*. 2017;19(7):727-736.

FROM THE PAGE ...

External skeletal fixators (ESFs) are commonly used by surgeons to correct bone fractures in cats. Common complications of ESFs include infection, pin loosening, and pin breakage. The incidence of complications in dogs is relatively high, but few studies have examined this in cats.

This retrospective study of 140 cats treated with ESF had an overall complication rate of 19% at a median time to diagnosis of 43 days postoperation. All fixators had a mean of 6 pins placed to secure the bone. Superficial pin tract infections ($n = 13$) were most often observed in humeral and femoral fractures; implant failure ($n = 12$) occurred more often in tibial and tarsal fractures. Together, these complications accounted for 86% of all reported problems. Serious complications of bone fracture ($n = 2$) or osteomyelitis/bone sequestrum ($n = 2$) were uncommon, accounting for 14.8% of all reported complications. The only significant association between complications and ESF frame feature was the use of intramedullary pins.

Higher rates of infection in the femur and humerus were suspected to occur due to discomfort, joint stiffness, and decreased use of the limb caused by interference of regional tendons and musculature. Pin failures in the tarsus were attributed to the ESF crossing a joint and use of smaller pins for these smaller distal bones.

... TO YOUR PATIENTS

Key pearls to put into practice:

1. ESF appears to be a safe method for correcting feline fractures, as 81% percent of fractures corrected via ESF in this study healed without complication.
2. Superficial infections and pin loosening or breakage may occur with ESF.
3. Infection may occur more commonly with fractures of the femur and humerus, whereas pin failure may occur more often with fractures of the tarsus and femur.

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