

Failure Of A Tightrope® Toggle System Due To Acetabular Pull-out

Chantelle van der Lingen¹

Lucas Beierer²

¹ Animal Referral Hospital Brisbane

² Queensland Veterinary Specialists

Failure of a TightRope® toggle system due to acetabular pull-out

Chantelle van der Lingen. Queensland Veterinary Specialists, Brisbane, Australia

Lucas Beierer. Queensland Veterinary Specialists, Brisbane, Australia

Commonly reported complications after toggle rod stabilisation of craniodorsal coxofemoral luxation include re-luxation due to suture breakage, breakage of the toggle pin or rod or the suture cutting through the ventral aspect of the femoral neck.

An 8 year-old, 12.8kg entire male American Cocker Spaniel was diagnosed with a right craniodorsal coxofemoral luxation based on clinical and radiographic findings. Open reduction and toggle rod stabilisation using a Tightrope® implant system was performed three days after initial closed reduction and augmentation via an Ehmer sling failed. A good outcome with eventual return to full activity was reported, however the patient re-presented after four months for recurrence of clinical signs suggestive of right coxofemoral luxation. Radiographs (right lateral recumbent, ventrodorsal frog leg and ventrodorsal extended leg views) demonstrated craniodorsal re-luxation of the right coxofemoral joint. The medial toggle button, originally located at the medial margin of the acetabular fossa, was located at the fovea capitis of the femur while the lateral toggle button remained in its original position at the lateral aspect of the femur distal to the greater trochanter. Computed Tomography imaging of the pelvis and pelvic limbs confirmed the radiographic findings and demonstrated a rectangular defect within the central acetabular fossa comparable in size to the toggle button. A right total hip replacement was subsequently performed with a satisfactory outcome.

This abstract describes a previously unreported mechanism of toggle rod failure which veterinary surgeons should consider in their management of open coxofemoral joint reduction.