Canine perineal hernia: a review of 44 cases

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This study examined complete case records of dogs presented to our practice who were diagnosed and treated for perineal hernia (PH) over a 7-year period (2005–2012) and reports short term and long term clinical outcome of these cases following treatment.

Forty four dogs with a total of 56 PH were reviewed. All dogs underwent surgery and were treated with a combination of anatomic reapposition of the pelvic diaphragm (PD) along with internal obturator muscle transposition (IOMT). In dogs with bilateral PH the second herniorrhaphy was performed with 4 weeks interval.

Breeds most commonly presented were German Shepherds (25%) and Mongrels (18.18%). Common causes of presentation were perineal swelling (84.1%), tenesmus (77.3%) and dyschezia (36.4%). Clinical examination findings revealed

that PH was unilateral (72.7%) or bilateral (27.3%). Unilateral hernias were categorized as right (68.75%) or left (31.25%). Prostate enlargement was further diagnosed in 17 (38.6%) dogs. During surgery hernial contents were retroperitoneal fat (69.64%), rectum (33.9%), prostate (14.28%), urinary bladder (7.14%) and small intestine (1.78%). Castration was performed in the same anesthetic episode to 42 dogs. One dog was already castrated a year before PH was diagnosed and one dog wasn't castrated due to owner's related reasons. Colopexy was performed in 2 dogs (4.54%) prior to PH repair. Postoperatively follow-up was performed initially with clinical examination and afterwards owners and referring vets were contacted via telephone. Mean follow-up time was 21.09 months (range 6–36 months). PH was resolved in 43 dogs (97.72%). One dog had recurrence 5 months after initial surgery but the owners were reluctant to further surgical intervention. Wound complications occurred in 6 cases (10.71%) within the first 30 days after surgery. Postoperative fecal straining persisted in 13 dogs (29.54%) and finally resolved in all patients 2–8 months after surgery (mean time 5.6 months). The outcome was recorded as excellent in 35 dogs (79.54%), good in 6 dogs (13.63%), fair in 2 dogs (4.54%) and poor in 1 dog (2.27%).

Although in the literature numerous techniques have been utilized to treat PH, a combination of PD anatomic reapposition along with IOMT should be considered as the preferred method of surgical repair.

Evaluation of an axial pattern flap based on the cranial cutaneous branch of the saphenous artery

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BACKGROUND

Axial pattern skin flaps are subdermal plexus flaps designed to include a direct cutaneous artery for wound reconstruction. An axial pattern flap based on the cranial cutaneous branch of the saphenous artery (CCSA) of the dog was previously described in a case report. The angiosome of the CCSA has not been investigated to determine whether this axial pattern flap is clinically applicable beyond a single case report.

OBJECTIVE

To determine the borders of an axial pattern flap based on the CCSA in dogs.

STUDY DESIGN

Cadaveric anatomic study.

METHOD

Ten Greyhound dogs were administered intravenous heparin immediately prior to euthanasia for reasons unrelated to this study, complying with ethical and welfare guidelines. The medial thighs were clipped and palpable anatomic landmarks outlined with a skin marker. A caudomedial skin incision and blunt dissection allowed identification and isolation of the CCSA. All other branches of the saphenous artery were ligated prior to infusion of methylene blue (left pelvic limbs) or iohexol (right pelvic limbs) into the CCSA via a cannula. The medial skin was freed from the thigh for photographic and radiographic studies to be performed, to assess skin perfusion.

RESULTS

The CCSA was reliably identified in all dogs branching from the saphenous artery as it became superficial to the biceps femoris muscle, immediately distal to the caudal cutaneous branch and proximal to the genicular branches, which were variably paired or singular. Methylene blue studies demonstrated perfusion of the skin on the medial thigh, extending proximally to anastomoses with superficial cutaneous branches of the deep circumflex iliac artery, cranially to the cranial border of the thigh and distally to the level of the tibial plateau. This pattern was well correlated with the radiographic assessment of vessel arborisation.